SAMSUNG
Electronics

8

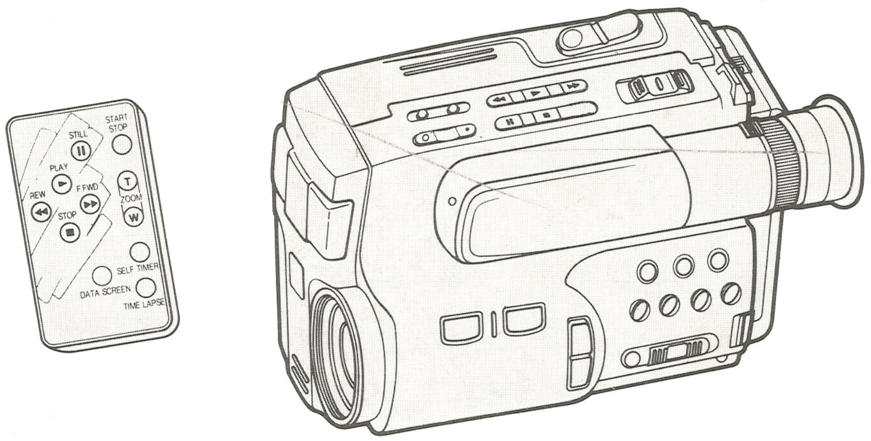
AF
Auto Focus
CCD
Charge Coupled Device

SERVICE MANUAL

MODEL : VP-E405

SCM-P2-005-1E
68139 - 422 - 107

8 mm CAMCORDER



SPECIFICATIONS

SYSTEM

Video recording system :	Rotary two heads, Helical scanning FM STEREO system
Audio recording system :	Rotary head, FM system
Video signal :	PAL color, CCIR standards
Usable cassette :	8mm video format cassette
Tape speed :	SP ; Approx. 20.051 mm/sec. LP ; Approx. 10.058 mm/sec.
Recording/Playback time :	SP mode ; 1 hour 30 min (P5-90) LP mode ; 3 hours (P5 - 90)
Fast forward/Rewind time :	Approx. 8.5 min. (P5 - 90)
Image device :	CCD (Charge Coupled Device)
Viewfinder :	Electronic viewfinder (black and white)
Lens :	Combined 8X power zoom lens F=1.8 with auto wide macro, Filter diameter ; 37 mm
Auto focus system :	TTL
Color temperature :	AUTO INDOOR 3,100° K OUTDOOR 5,100° K
Minimum illumination :	3 Lux
Recommended illumination :	More than 300 lux (28 footcandles)
Aperture correction :	Automatic Back light adjustment

INPUT AND OUTPUT CONNECTOR

Video output :	Phono jack, 1 Vp-p, 75 ohms unbalanced, sync negative
Audio output :	Phono jack, - 7.0 dBs, at output impedance less than 2.2 kilohms
RFU DC OUT :	Special minijack, 5 V DC
Earphone jack :	Minijack, 8-ohm impedance
MIC jack :	Minijack -66dBs low impedance

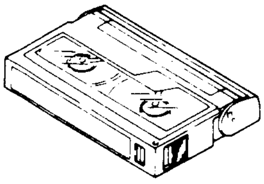
GENERAL

Power requirements :	AC power adaptor (7.5V) Alkaline batteries (9.0V) Battery pack (6.0V)
Power consumption :	7.2Watt (camera recording)
Operating temperature :	0° C to 40° C (32° F to 104° F)
Storage temperature :	-20° C to 60° C (-4° F to 140° F)
Dimensions (W/H/D) :	Approx. 106 x 109 x 175mm (4.3 x 5 x 12.2 inch)
Weight :	Approx. 0.75Kg
Microphone :	Electric condenser microphone, directional stereo type

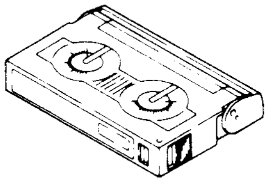
LIST OF SERVICING JIGS

Ref. NO.	JIG ITEM	CODE NO.	SPECIFICATION	DESCRIPTION
J-1	Alignment Tape	68140-200-108 68140-200-109 68140-200-110 68140-200-111 68140-200-112 68140-500-007	PAL ; SE1-2L PAL ; SE2-2 PAL ; SE2-2L PAL ; SE4-2L PAL ; SEM-2L PAL ; SE2-2S	; LP LION PATTERN : 400Hz ; SP COLOR BAR : 400Hz ; LP COLOR BAR : 400Hz ; TAPE PATH ; H'd Q ADJUSTMENT ; SP STEREO (L CH : 400Hz, R CH : 1KHz)
J-2	Back Tension Cassette Tape	68140-200-123	COMMON	; Use for back tension adjustment of supply reel.
J-3	Guide Roller Adjusting Driver	68140-200-113	COMMON	; Use for height adjustment of Guide Roller for envelope linearity adjustment.
J-4	Extension Cable	68140-400-023	Pin 16	; Use for T/S connecting cable between VTR Main board (CN203) and AUDIO board (CN703).
J-5	Extension Cable	68140-400-024	Pin 12	; Use for T/S connecting cable between Lens Drive board (CN402) and Super Impose board (CN602).
J-6	Extension Cable	68140-400-025	Pin 20	; Use for T/S connecting cable between CAM Main board (CN305) and Super Impose board (CN601).

J-1



J-2



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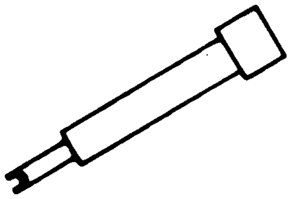

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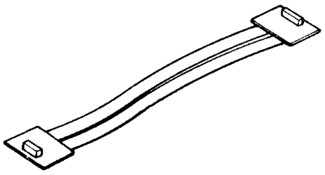

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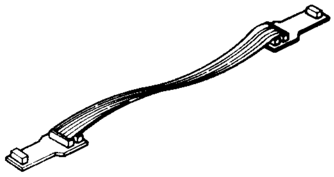

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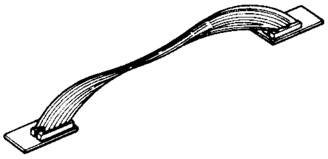
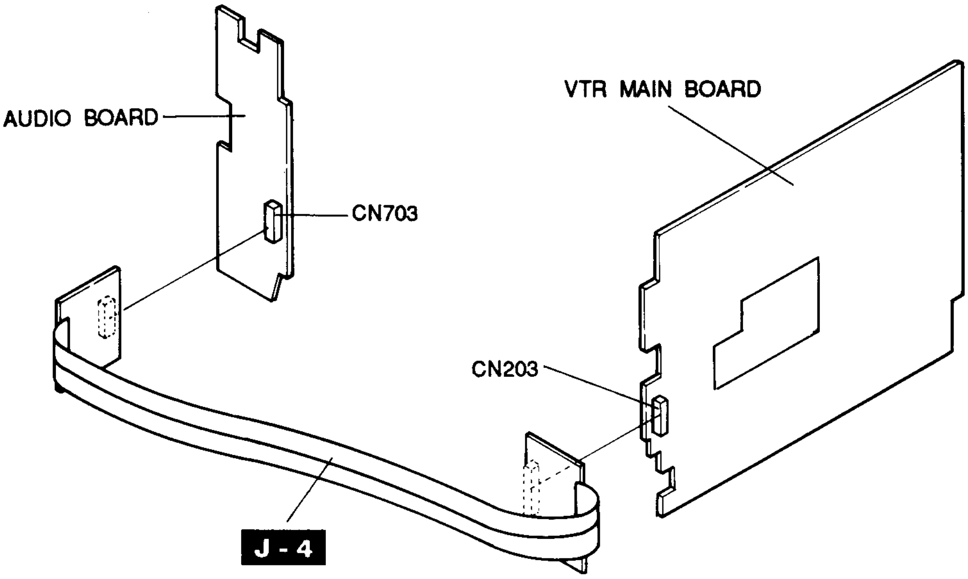
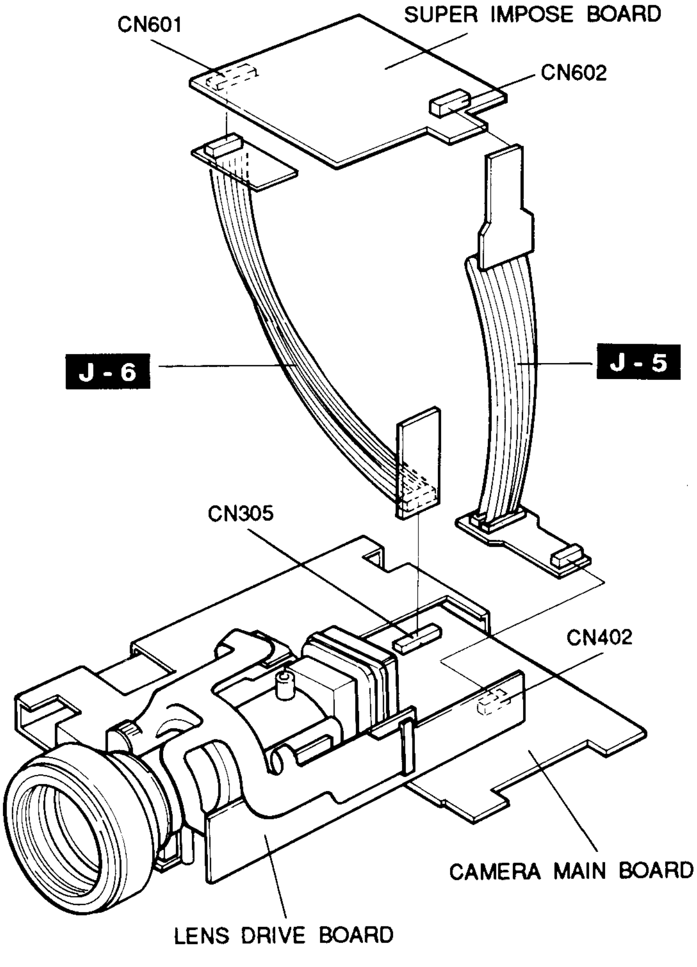


Extension Cable Connections


AUDIO BOARD
VTR MAIN BOARD
CN703
CN203
J - 4


CN601
SUPER IMPOSE BOARD
CN602
J - 6
J - 5
CN305
CN402
CAMERA MAIN BOARD
LENS DRIVE BOARD

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1.GENERAL DESCRIPTION

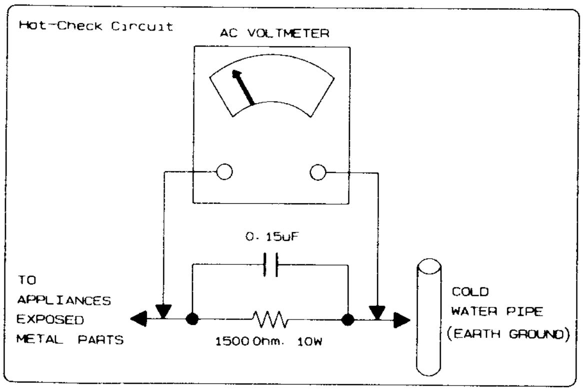
1-1. SAFETY PRECAUTIONS

GENERAL GUIDE LINE

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged.
2. After servicing , see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.
4. Use a separated isolation transformer for this unit when servicing.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet, part on the equipment such as screw heads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1m and 5.2m. When the exposed metal does not have a return path to the chassis, the reading must be oo.



LEAKAGE CURRENT HOT CHECK (See Fig.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect an 1.5K, 10 watt resistor, in parallel with a 0.15uF capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in figure.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester may be used to make the hot checks, leakage current must not exceed 0.5 milliamp.
In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

1-2. ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called "Electrostatically Sensitive (ES) Devices". Examples of typical ES devices are integrated circuits, some field effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.
1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti static solder removal device. Some solder removal devices not classified as "anti static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise, harmless motion such as the brushing together of your clothes fabric to the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

1-3. FEATURES

- * CCD Pick Up Device
- * Auto Focus, Power Zoom Lens
- * Auto IRIS
- * Auto Tracking
- * Electronic Viewfinder
- * Full record and playback capability with 8mm cassette
- * Variable high speed shutter
- * Fade In/Out
- * Recording Review
- * On-Screen Displays (OSD)
- * Edit Search
- * Superimpose
- * SP mode and LP mode recording
- * Auto lock

1-4. SAFETY INSTRUCTIONS

1. Read Instructions : All the safety and operating instructions should be read before the CAMCORDER is operated.

2. Retain Instructions : The safety and operating instructions should be retained for future reference.

3. Heed Warnings : All warnings on the CAMCORDER and the operating instructions should be adhered to.

4. Follow Instructions : All operating and maintenance instructions should be followed.

5. Cleaning : Unplug this CAMCORDER from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for dusting cabinet.

6. Attachments : Do not use attachments not recommended by the CAMCORDER product manufacturer, as they may be hazardous or cause damage.

7. Water and Moisture : Do not use this CAMCORDER near water-IE bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, or the lake.

8. Accessories : Do not place this CAMCORDER on an unstable cart, stand, tripod, bracket, or table.
The CAMCORDER , if dropped could cause damage or injury. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the CAMCORDER . Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.

a. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surface may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING
(Symbol provided by RETAC)

9. Ventilation : Slot and opening in the cabinet are provided for ventilation to ensure reliable operation of the CAMCORDER and to protect it from overheating. These openings must not be blocked or covered. Never place your CAMCORDER on a bed,sofa,rug,or other similar surface on or near a radiator or heat register. This CAMCORDER should not be placed in a built-in installation such as a book case or rack unless proper ventilation is provided or manufacturer's instructions have been adhered to.

10. Power Sources :This CAMCORDER should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. To operate the CAMCORDER by battery or other power source, consult the operating instructions.

11.Grounding and Polarization: This CAMCORDER may be equipped with either a polarized 2-wire AC line plug (a plug having one blade wider than the other) or a 3-wire grounding type plug, a plug having a third (grounding) pin. The 2-wire polarized plug will fit into the power outlet only one way. This is a safety feature.
If you are unable to insert the plug fully into the outlet,try reversing the plug. If the plug still fails to fit, contact your electrician to replace your outlet. Do not defeat the safety purpose of the polarized plug.

12. Power-Cord Protection : Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, especially cords of plugs and convenience receptacles, at the point where they exit from the unit.

13. Lightning : For added protection of this CAMCORDER during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage of the CAMCORDER from lightning and power-line surges.

14. Power Lines : An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, where it can fall into such power lines or circuit. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

15. Overloading : Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

16. Objects and Liquids : Never push objects of any kind into the CAMCORDER as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquids of any kind onto the CAMCORDER. Should spill occur, unplug unit and have it checked by a technician before use.

17. Servicing : Do not attempt to service this CAMCORDER yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service person.

18. Damage Requiring Service : Unplug this CAMCORDER from the wall outlet and refer servicing to qualified service personnel under the following conditions :

a. When the power-supply cord or plug is damaged.
b. If any liquid has been spilled into, or objects have fallen in the CAMCORDER.
c. If the CAMCORDER has been exposed to rain or water.
d. If the CAMCORDER does not operate normally by following the operating instruction, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the CAMCORDER to its normal operation.
e. If the CAMCORDER has been dropped or the cabinet has been damaged.
f. When the CAMCORDER exhibits a distinct change in performance, this indicates a need for service.

19. Replacement Parts : When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part.
Unauthorized substitutions may result in fire, electric shock or other hazards.

20. Safety Check : Upon completion of any service or repairs to this CAMCORDER , the safety check procedure should be performed.

IMPORTANT SAFETY NOTICE
There are special components in this equipment which are important for safety. These parts are marked by⚠in the schematic diagram, exploded views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts owing to shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

WARNING ;
Lithium battery - Danger of explosion if incorrectly replaced.
Must only be replaced by a battery of same make and type.
Used batteries shall be returned to the supplier.

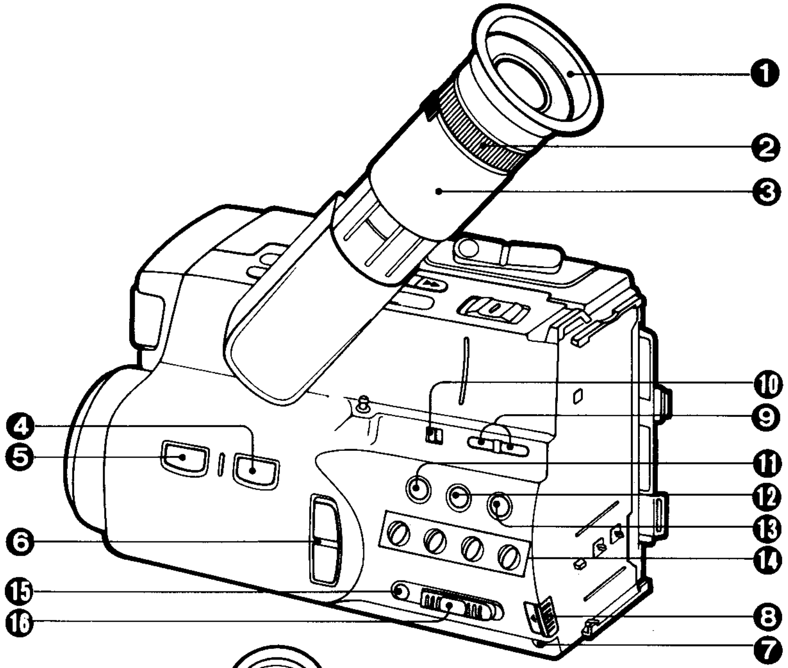
VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera anvant batteri enligt fabrikantens
instruktion.

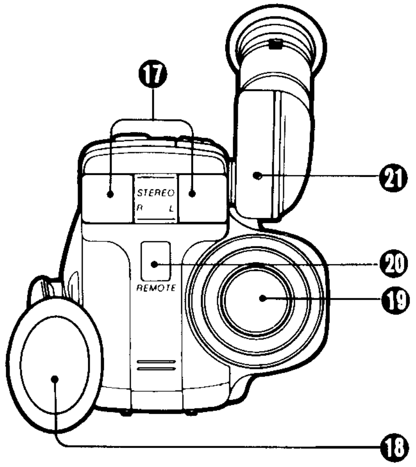
ADVARSEL
Lithiumbatteri - Eksplosionafare ved fejlagtig håndtering.
Udskifthing må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

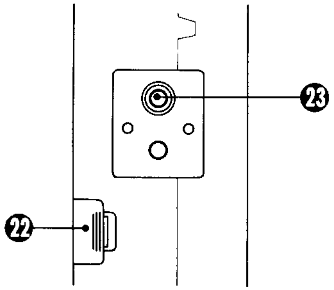
VAROITUS
Earisto voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

ADVARSEL
Lithiumbatteri - Eksplosjonsfare.
Ved utskifting benyttes kun batteri som
anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

CONTROLS AND COMPONENTS (SIDE VIEW)







① EYE CAP

② EVF FOCUS CONTROL RING
To use the electronic viewfinder without eye glasses, turn this control ring for your optimum focus adjustment.

③ ELECTRONIC VIEWFINDER(EVF)
Displays in black and white what the CAMCORDER lens sees. The electronic viewfinder also functions as convenient black and white monitor during playback of recorded material.

④ FADE BUTTON
During recording you can add a professional touch to your recordings by fading in and out of scenes.

⑤ WHITE BALANCE BUTTON
Used for manual white balance adjustment.

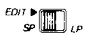
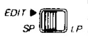
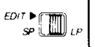
⑥ MANUAL FOCUS ADJUST BUTTON
When the focus is set to manual mode, it can be adjusted as required using the FAR or NEAR button.

⑦ EARPHONE JACK
Sound being recorded by the microphoner played back may be monitored by attaching earphone (not supplied) to this jack.

⑧ BATTERY EJECT LEVER
Release the battery attached to the CAMCORDER.

⑨ DATE/TIME BUTTON
Press to display or turn off the date or time.

⑩ RECORD SPEED AND EDIT ON/OFF SELECTION SWITCH

Mode	Recording	Playback	Editing
Setting			
Function	Recording mode switch	EDIT switch	

⑪ PROGRAM AE BUTTON
Program AE automatically selects just the right combination of shutter and aperture settings and gives you creative control of depth of field.

⑫ SHUTTER SPEED CONTROL BUTTON
Used to control the shutter speed.

⑬ DATA SCREEN BUTTON
Press to display the information on the TV

⑭ SUPER IMPOSE BUTTON
Used to record the title.
MEMORY button, COLOR/MODE button, TITLE button, WIPE button

⑮ AUTO/MANUAL FOCUS MODE SELECT BUTTON
When the AUTO LOCK switch is in the MANUAL position, the focus mode is selected by this button.

⑯ AUTO LOCK SWITCH
Keep this switch in the AUTO LOCK position for the automatic adjustment of the FOCUS, WHITE BALANCE, or SHUTTER SPEED.
To adjust these manually, set this switch to MANUAL position.

⑰ MICROPHONE
Is incorporated in the Camcorder.

⑱ LENS CAP
Protects lens when camera not in use.

⑲ LENS
F1.8 (f=6.0~48mm), ×8
POWER ZOOM LENS features auto focus and auto iris function.

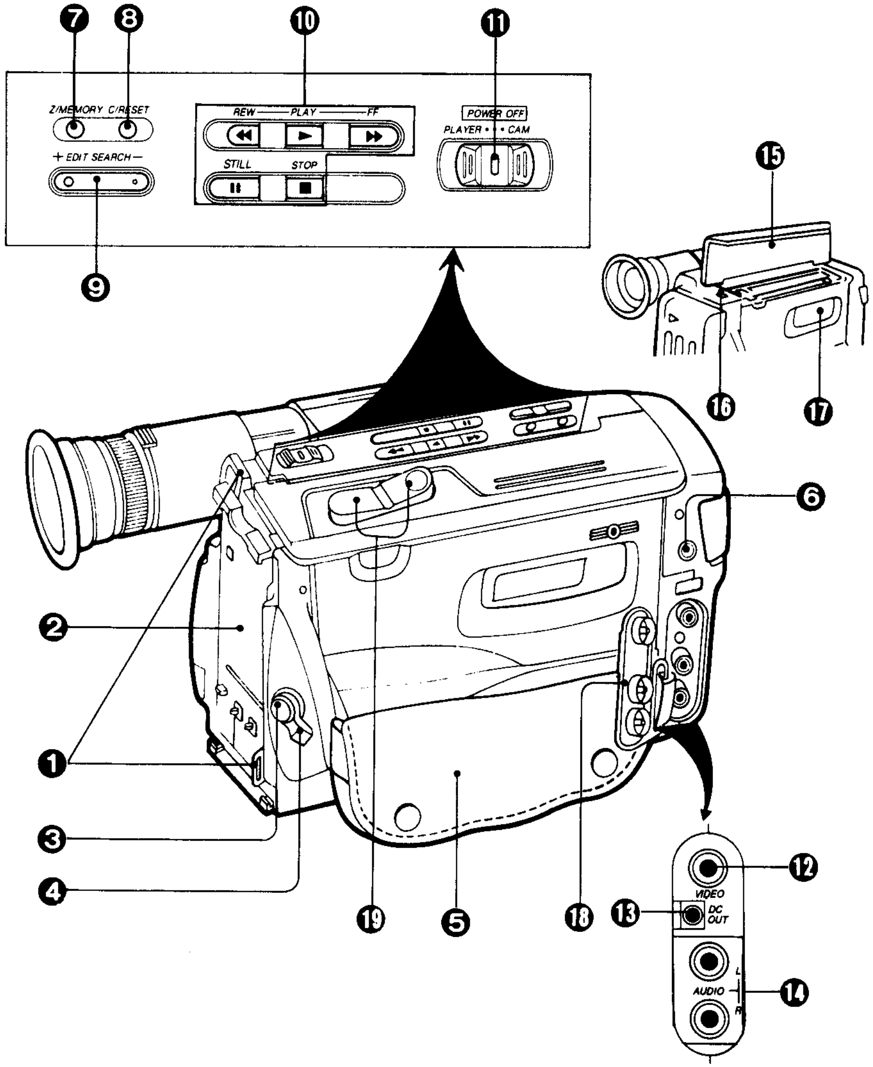
⑳ REMOTE CONTROL WINDOW
Receives the signals from the remote control.

㉑ CAMERA RECORD INDICATOR
Lights during camera recording.

㉒ LITHIUM BATTERY COMPARTMENT

㉓ TRIPOD RECEPTACLE
The length of the camera mounting screw must be less than 6mm

CONTROLS AND COMPONENTS(TOP VIEW)



① HOOKS FOR SHOULDER STRAP
Attach a shoulder strap.

② BATTERY MOUNTING POSITION

③ CAM REC START/STOP button
Press to start and stop camera recording.

④ STANDBY/LOCK SWITCH
Turn to STANDBY to set the CAMCORDER to recording pause mode.

⑤ HAND STRAP
Adjust to best fit your hand.

⑥ EXTERNAL MIC JACK
Connect an external microphone (not supplied) here to reord sound.

NOTE

Connecting an external microphone automatically switches off the built-in microphone.

⑦ ZERO MEMORY BUTTON
Used to memorize the counter zero point.

⑧ COUNTER RESET BUTTON
Press to reset the counter zero point

⑨ EDIT SEARCH BUTTON
(And record review button)

⑩ VTR FUNCTION BUTTON
These buttons will not operate unless POWER select switch is in the PLAYER position.
▶ (playback) ■ (stop) ◀◀ REW (rewind)
▶▶ FF (fast forward) ❚❚ (still)

⑪ POWER SELECT SWITCH
CAM : For camera recording
OFF : Power off
PLAYER : For playing back, editing tapes.

⑫ VIDEO OUT JACK
(Phono jack)

⑬ RFU DC OUT
Supplies power to RF unit.

⑭ AUDIO (L/R) OUT JACKS
(Phono jacks)

⑮ COVER CASE

⑯ EJECT SWITCH
Press this switch to open the cassette door for tape insertion or removal.

⑰ CASSETTE HOLDER

⑱ A/V JACK PROTECTION COVER
Keep closed when camera not in use to prevent dust and moisture from entering A/V OUT JACK.

⑲ POWER ZOOM SWITCH
The switch performs zooming electrically.
W : Picture gradually becomes wider
T : Picture gradually becomes tighter

USING THE BATTERY PACK

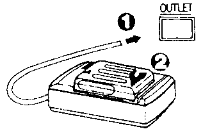
FIRST, CHARGE THE BATTERY PACK.

- Use the AA-E1P(U) AC power adaptor.

TO CHARGE THE BATTERY PACK.

1. Connect the AA-E1P(U) to a wall outlet.
2. Attach the battery pack to the AA-E1P(U)

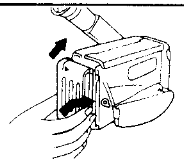
- While pressing the battery pack, slide as illustrated.



※The plug and wall outlet depends on your country.

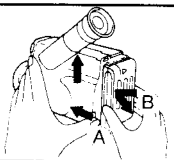
TO ATTACH THE BATTERY TO THE CAMCORDER.

1. Press the battery pack slide to the right as illustrated.
2. Make sure that the battery pack is fitted completely to the mounting surface.



REMOVE THE BATTERY PACK

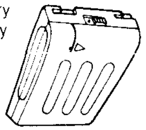
Press the BATT EJECT KNOB Ⓐ and slide and remove the battery pack Ⓑ as illustrated.



IDENTIFICATION OF THE BATTERY STATUS

A switch on the battery pack may be used to identify the condition of the battery.

For example
RED : charged battery
BLACK : used battery



BATTERY	CHARGING TIME	CONTINUOUS REC TIME
NB-E70	about 1hr 10min.	about 40min.
NB-E120A	about 2hrs.	about 80min.

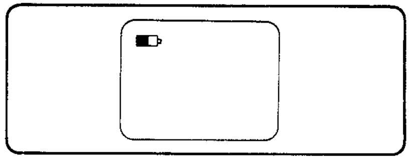
- NB-E120A is not supplied.

NOTES

1. Life of battery pack depends upon how much use is made of ZOOM & STANDBY.
2. When the CAMCORDER is not in use, remove the battery pack to prevent consumption.

BATTERY LEVEL CHECK

The battery level indicators in the camcorder's viewfinder display how much time is left on the battery. Press the DATA SCREEN button on the CAMCORDER to display the battery level indicator in the viewfinder.



Dispalyed mark indicates the present residual level of battery.

- When the battery is full charged, the mark will be. (■)
- When the battery is nearly empty, the mark will be. (□)
- When the battery level indicator starts blinking, it is time to recharge the battery.(□)

CAUTION

When the battery reaches its empty level during use, the CAMCORDER will shut off. However, the battery should have enough reserve power to eject the cassette when you press the EJECT button.
If the CAMCORDER does not eject the casette when you press EJECT do not attempt to force the cassette door open. This will damage your CAMCORDER.

CHARGE & DISCHARGE

To use the battery pack for a long time, charge the battery pack-fully and discharge it.

CHARGING

- The battery pack can be charged within a temperature range of 0°C to 40°C (32°F go 104°F)
  However, it is hard to charge the battery pack in a cold place. We recommend undertaking charging operations within a temperature range of 10°C to 30°C (50°F to 86°F)
- The battery pack was not charged at the factory so before using the battery pack, please charge it.
- If the battery pack is charged fully, but not used for a long time (about 1 year), it discharges. Please charge it again, but note the battery life is shortened.
- After several charging and discharging operations, the battery life will recover its original status.
- The battery pack may be warm after use or after charging, but this is normal. This is due to the chemical change that has occured inside the battery.

DISCHARGING

- After using the CAMCORDER, remove the cassette and set the POWER switch to CAMERA Turn the STANDBY/LOCK switch toward STANDBY position, and leave the CAMCORDER until the battery pack is fully discharged.
- If recharging is repeated before the battery is exhausted, the battery life will be shortened.
  If the battery life has been shortened, discharge it to recover the original battery capacity.
- We recommend using the battery pack until the warning indicator blinks.

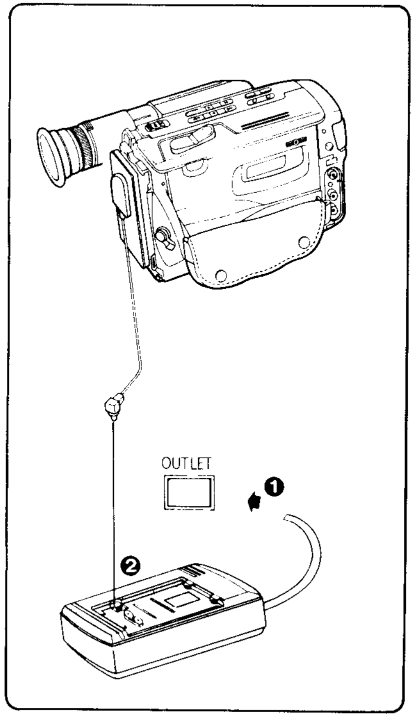
NOTE

If a fully charged battery pack is charged again it may not work immediately afterwards. Leave it for 30 minutes before using.

USING AC POWER ADAPTOR

TO USE AC POWER ADAPTOR.

1. Connect AC power adaptor to a wall outlet.
2. Insert the DC CABLE supplied with the AA-E1P(U) (AC power adaptor) into DC OUT jack on the AC power adaptor.
3. While pressing the connecting plate, slide it to the right.



TO REMOVE THE CONNECTING PLATE FOR THE AC POWER ADAPTOR FROM THE CAMCORDER.

while pressing the BATT EJECT knob on the CAMCORDER, slide and pull out the connecting plate.

SAFETY INSTRUCTIONS FOR AC ADAPTOR/ CHARGER

☐To reduce risk of injury, charge only rechargeable battery, type NB-E70, NB-E60A, NB-E120A.

☐Do not operate adaptor with damaged cord or plug.

☐Make sure cord is so that it will not be stepped on, tripped over, or otherwise subjected to damage.

☐Do not expose adaptor to moisture of any kind.

☐Do not operate adaptor if it has received a sharp blow, or been dropped. Take it to a qualified serviceman.

☐To reduce risk of electrical shock, unplug adaptor from outlet before attempting any maintenance or cleaning.

☐To reduce risk of damage to electric plug and cord, pull by plug when disconnecting adaptor.

☐Do not dismantle adaptor, take it to consumers service centre.

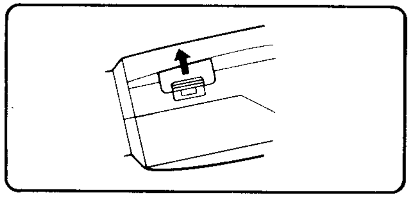
☐Do not use incorrect extension cord.

USING LITHIUM BATTERY

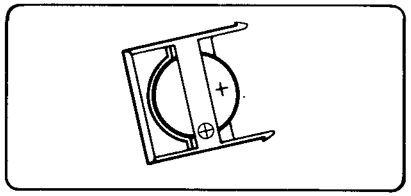
This CAMCORDER uses a lithium battery to activate the clock and keep a title in memory.
Before operating the CAMCORDER for the first time. install the lithium battery supplied.

TO INSERT THE LITHIUM BATTERY

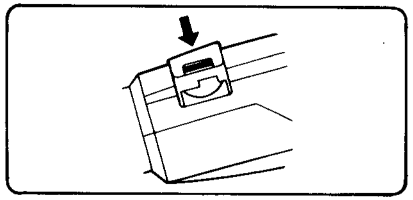
1 To remove the lid of the lithium-battery compartment, slide it in the direction of the arrow.



2 Install the lithium-battery with the ⊕side facing out.



3 Insert the lid.



LITHIUM BATTERY LIFE

Approximately 1 year in normal operation.
When the lithium battery becomes weak or is not inserted or the date, time have not yet been set, the date, time indication will blink on the viewfinder screen for about 5 seconds after the POWER switch has been set to CAMERA. In this case, replace the battery with CR2025 lithium battery or set the date, time.
After replacing the battery, re-adjust the date, time and title. (If the lithium battery is replaced with the battery pack attached, the re-adjustments are not necessary.)

WARNING

There is a danger that the lithium battery will explode if incorrectly replaced. The lithium battery must only be replaced by one of same make and type. Used batteries should be returned to the supplier.

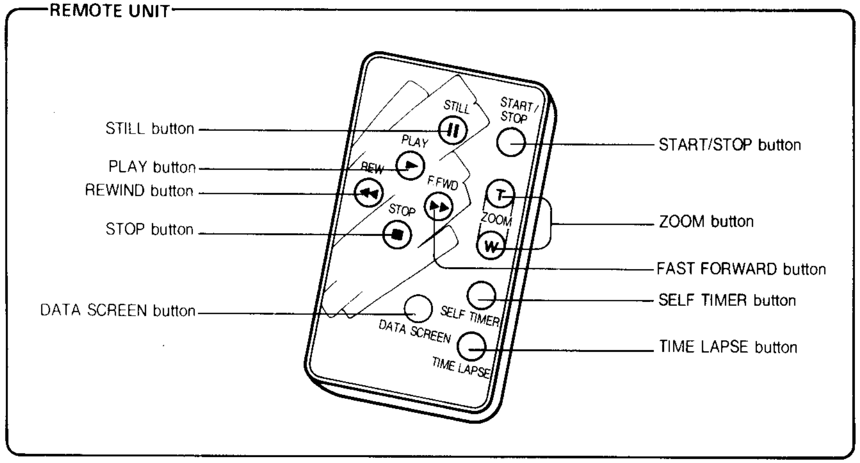
NOTES

- Keep the lithium battery out of the reach of children.
  Should the battery be swallowed, immediately consult a doctor.
- Wipe battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

WIRELESS REMOTE CONTROL

REMOTE CONTROL

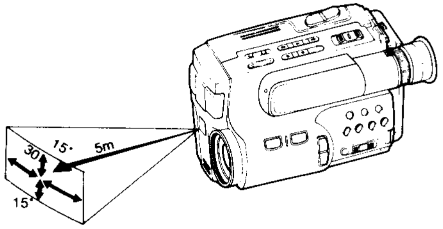
For convenience your Camcorder can be operated with an infrared wireless remote control. The buttons labelled on the Remote unit operate same functions as those labelled on the camcorder.


REMOTE UNIT
STILL button
PLAY button
REWIND button
STOP button
DATA SCREEN button
START/STOP button
ZOOM button
FAST FORWARD button
SELF TIMER button
TIME LAPSE button
STILL
START/STOP
PLAY
REW
FFWD
STOP
T
ZOOM
W
SELF TIMER
DATA SCREEN
TIME LAPSE

OPERATING RANGE

Point the remote control to the remote sensor of the Camcorder.

The Camcorder can be used within the range as illustrated.



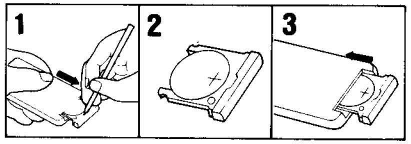
Operating range is able to be shortened in out door because the Remote unit use an Infrared.

The operating range is shortened outdoors because the remote unit uses an infrared sensor.

To operate the camcorder with the remote unit outdoors the camcorder should be positioned in a shaded area for as long as possible.

INSTALLING BATTERIES

Insert the lithium battery (CR2025) with correct polarity.



To avoid damage from possible battery leakage.

If you do not intend to use the remote for a long period of time, remove the batteries and store them in a cool, dry place.

NOTES

- In "CAM" mode, the camcorder can receive the following commands.
  START/STOP, TELEPHOTO, WIDEANGLE, DATA SCREEN, SELF TIMER, TIME LAPSE.
- In "PLAYER" mode, the camcorder can receive the following commands.
  PLAY, STILL, REWIND, FAST FORWARD, STOP DATA SCREEN.

1-6. REPLACEMENT PROCEDURE FOR LEADLESS (CHIP) COMPONENT

※ The following procedures are recommended for the replacement of the leadless components used in this unit.

1. Preparation for replacement

a. Soldering Iron
Use a pencil-type soldering iron that uses less than 30 watts.

b. Solder
Eutectic solder (Tin 63%, Lead 37%) is recommended.

c. Soldering time
Do not apply heat more than 4 seconds.

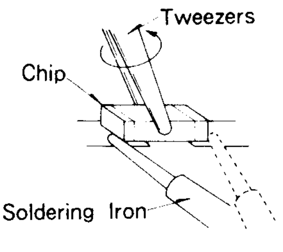
d. Preheating
Leadless capacitor must be preheated before installation. (130° C~150° C, for about two minutes).

Note :
a. Leadless component must not be reused after removal.
b. Excessive mechanical stress and rubbing of the component electrode must be avoided.

2. Removing the leadless component (Resistors, Capacitors)

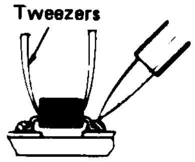
Grasp the leadless component body with tweezers and alternately apply heat to both electrodes. When the solder on both electrodes is melted, remove leadless component with a twisting motion.

Note :
a. Do not attempt to lift the component off the board until the component is completely disconnected from the board by a twising action.
b. Take care not to break the copper foil on printed board.

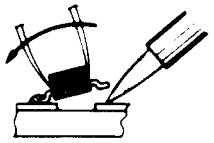


3. Removing the chip component (Transistors, Diodes)

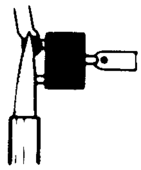
1) Melt the solder of one lead.



2) Lift the side of that lead upward.

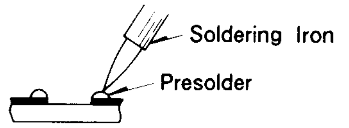


3) Simultaneously heat solder of the two remaining leads and lift part to remove.



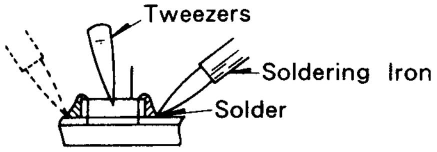
4. Installing the Leadless (chip) Component

1) Presolder the contact points of the circuit board.


Soldering Iron
Presolder

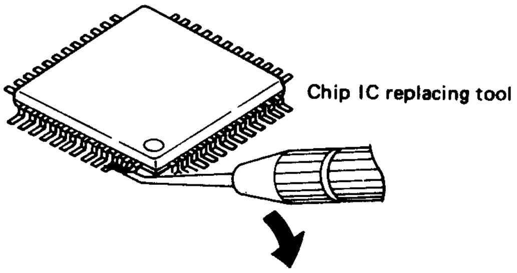
2) Press the part downward with tweezers and solder both electrodes as shown below.

Note :
Do not glue the replacement leadless component to the circuit board.


Tweezers
Soldering Iron
Solder

5. Removing of Flate ICs
(Recommendable manner)

1) For removing solder chips from IC's pins, use a solder remover or a wiry solder absorber.
2) Heat the IC's tips evenly by moving the chip IC replacing tool around them, and detach the IC's leads with a tool in the way of using a lever.
3) Do not reuse ICs removed once (Discard them).


Chip IC replacing tool

1-7. HOW TO REPLACE LEADLESS (CHIP) COMPONENT

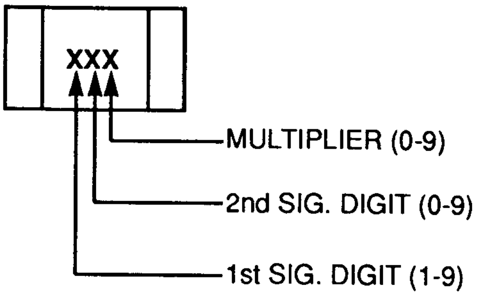
1. Check the followings before S.M.D Troubleshooting

- Cracked or Chipped Component Body
- Cracked or Separated Solder Joints
- Peeling end Terminations or Fractured Leads
- Rejection of Solder from Copper Pads or Component
- Foreign Matter on Copper Pads
- Solder Bridges

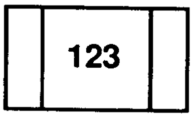
2. S.M.D (Surface Mounted Devices) Identification

1) Chip Resistor Identification

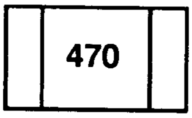
※ Standard Chip Resistor Code


XXX
MULTIPLIER (0-9)
2nd SIG. DIGIT (0-9)
1st SIG. DIGIT (1-9)

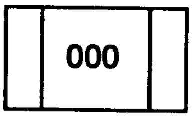
Examples



= 12 x 10^3(1000) = 12000 Ω
= 12K Ω



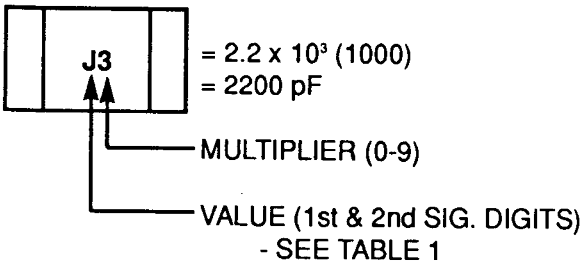
= 47 x 10^0 (1) = 47 Ω



= CHIP JUMPER = 0 Ω

2) Chip Capacitor Identification

※ Standard Two Place Code


J3
MULTIPLIER (0-9)
VALUE (1st & 2nd SIG. DIGITS)
- SEE TABLE 1

= 2.2 x 10^3 (1000)
= 2200 pF

Examples

S2 = 4.7 x 100 = 470 pF

b0 = 3.5 x 1.0 = 3.5 pF

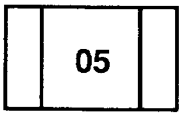
Note : Ceramic chip capacitor is no marking.

VALUE (33 VALUE SYMBOLS) - UPPER AND LOWER CASE LETTERS					MULTIPLIER
A — 1.0	H — 2.0	b — 3.5	f — 5.0	X — 7.5	0 = x 1.0
B — 1.1	J — 2.2	p — 3.6	T — 5.1	t — 8.0	1 = x 10
C — 1.2	K — 2.4	Q — 3.9	U — 5.6	Y — 8.2	2 = x 100
D — 1.3	a — 2.5	d — 4.0	m — 6.0	y — 9.0	3 = x 1000
E — 1.5	L — 2.7	R — 4.3	V — 6.2	Z — 9.1	4 = x 10000
F — 1.6	M — 3.0	e — 4.5	W — 6.8		5 = x 100000 etc.
G — 1.8	N — 3.3	S — 4.7	n — 7.0		

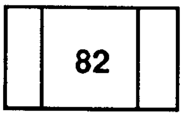
----- TABLE 1 -----

※ Alternate Two Place Code

- Values below 100 pF - Value Read Directly

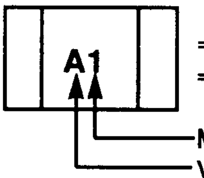


= 5 pF

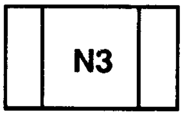


= 82 pF

- Values 100 pF and above - Letter / Number Code


A1
MULTIPLIER (1-9)
VALUE (1st & 2nd SIG. DIGITS)
- SEE TABLE 2

= 10 x 10
= 100 pF

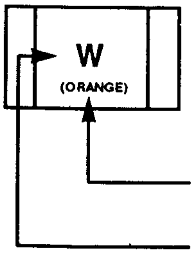


= 33 x 1000
= 33000 pF
= 0.33 uF

VALUE (24 VALUE SYMBOLS) - UPPERCASE LETTERS ONLY					MULTIPLIER
A — 10	F — 16	L — 27	R — 43	W — 68	1 = x 10
B — 11	G — 18	M — 30	S — 47	X — 75	2 = x 100
C — 12	H — 20	N — 33	T — 51	Y — 82	3 = x 1000
D — 13	J — 22	P — 36	U — 56	Z — 91	4 = x 10000
E — 15	K — 24	Q — 39	V — 62		5 = x 100000 etc.

----- **TABLE 2** -----

※ Standard Single Place Code


W
(ORANGE)
COLOR-MULTIPLIER
SYMBOL-VALUE
- SEE TABLE 3

= 4.7 x 1.0=4.7 pF

Examples

R (Green) = 3.3 x 100 = 330 pF

7 (Blue) = 8.2 x 1000 = 8200 pF

VALUE (33 VALUE SYMBOLS) - UPPER AND LOWER CASE LETTERS					MULTIPLIER
A — 1.0	H — 1.6	N — 2.7	V — 4.3	3 — 6.8	ORANGE = x 1.0
B — 1.1	I — 1.8	O — 3.0	W — 4.7	4 — 7.5	BLACK = x 10
C — 1.2	J — 2.0	R — 3.3	X — 5.1	7 — 8.2	GREEN = x 100
D — 1.3	K — 2.2	S — 3.6	Y — 5.6	9 — 9.1	BLUE = x 1000
E — 1.5	L — 2.4	T — 3.9	Z — 6.2		VIOLET = x 10000
					RED = x 100000

----- **TABLE 3** -----

1-8. ABBREVIATION

ATF : Automatic Track Finding
AC : Alternating Current
AGC : Automatic Gain Control
AMP : Amplifier
ASS'Y : Assembly
AUTO : Automatic
AE : Auto Exposure
AF : Auto Focus
A/D : Analog/Digital
APC Automatic Phase Control
ACK : Automatic Color Killer
ACC : Automatic Color Control
AFC : Automatic Frequency Control
AFM : Audio Frequency Modulation
ATT : Attenuator
ADJ : Adjust
ADD : Adder
AUX : Auxiliary

B : Base
BATT : Battery
BLK : Black, Blanking
BLU : Blue
BPF : Band Pass Filter
BRN : Brown
B/W : Black/White
BLC : Back Light Compensation
BF : Burst Flag
BFG : Burst Flag Gate
BUFF : Buffer

CAP. : Capstan
CASS(CC) : Cassette
CBA : Circuit Board Assembly
CCD : Charge Coupled Device
CE : Chip Enable
CH : Channel
CHROMA or C : Chrominance
COM : Common
COMB : Comb Filter
CN : Connector
CTL : Control
CRT : Cathode Ray Tube
CAM : Camera
CAMCORDER : Camera Recorder
COMP : Composite
CS : Chip Selector
CM : Capstan Motor
CG : Character Generator
CLP : Clamp
CNR : Chroma Noise Reduction
CLK : Clock

dB : Decibel (Measurement Unit)
DC : Direct Current
DEMOD : Demodulator
DOC : Drop Out Compensation
DD : Direct Current Drive
DM : Drum Motor
DET : Detect
DL : Delay Line
D/A : Digital/Analog
DY : Deflection Yoke

E : Emitter
E-E : Electronic to Electronic
EMP : Emphasis
ENV : Envelope
EQ : Equalizer
EXT : External
EVF : Electronic View Finder

F : Fuse
F.F : Fast Forward, Flip-Flop
FE : Flying Erase
FET : Field Effect Transistor
FG : Frequency Generator
FM : Frequency Modulation
Freq. : Frequency
FWD : Forward
FPC : Flexible Pattern Circuit
FPS : Forward Picture Search
FL : Filter
FSC : Frequency Sub Carrier

G : Gate, Grid
GEN : Generator
GND : Ground
GRN : Green
GRY : Gray
GC : Gain Control

H : Hour, High, Horizon
HG : Hall Generator
HPF : High Pass Filter
Hz : Hertz
HMS Counter : Hour Minute Second Counter
HD : Head, Horizontal Drive

IC : Integrated Circuit
ID : Identification
IR : Infrared

INT : Interrupter
I/O : Input/Output
IRE : Institute of Radio Engineers

L : Low
LI : Lithium
LCD : Liquid Crystal Display
LED : Light Emitting Diode
LP : Long Play
LM : Loading Motor
LPF : Low Pass Filter

M : Mega
MAX : Maximum
MIC : Microphone
MIN : Minimum
MIX : Mixer
MT : Motor
ME : Metal Evaporated
MP : Metal Particle, Mask Pulse
MTX : Matrix
MOD : Modulation
M/F : Manual Focus
MCK : Master Clock

NR : Noise Reduction
NC : Not Connected
NAND : NOT-AND

OP AMP : Operational Amplifier
ORN : Orange
OSC : Oscillation
OFD : Overflow Drain

PB : Play Back
PBLK : Pre Blanking
PCM : Pulse Coded Modulation
PG : Pulse Generator
PLA : Programmable Logic Array
PLL : Phase Locked Loop
P-P : Peak to Peak
PRE-AMP : Pre-Amplifier
P/S : Pause/Still
PWM : Pulse Width Modulation
PWR : Power

RAM : Random Access Memory
REF : Reference
REC : Recording
REMOCON : Remote Control
REV : Reverse
REW : Rewind
ROM : Read Only Memory
RST : Reset
RPS : Reverse Picture Search
RF : Radio Frequency
REG : Regulation

SN : Signal to Noise Ratio
SP : Standard Play
SHD : Sample Hold Data
SHP : Sample Hold Precharge
SIG : Signal
S/W : Switch
SYNC : Synchronization
SYSCON : System Control
SENS : Sensor
SI (DDS SI) : Serial Data Input
SO (DDS SO) : Serial Data Output
SCK : Serial Clock
S FG : Supply FG
STB : Strobe
SHP : Sharpness

TP : Test Point
TR : Transistor, Trimmer
T FG : Take-up FG

UNREG : Unregulated

V : Volt, Vertical
V-sync. : Vertical-sync.
VCO : Voltage Control Oscillator
VR : Variable Resistor
VXO : Variable Crystal Oscillator
VCR : Video Cassette Recorder
VP : VTR Power
VA : Video Audio

W : Watt, Wide, Wire
WBLK : Wide Blanking
WHT : White
WND : Window

X-TAL : Crystal

Y-CLP : Luminance Clamp
Y/C or YC : Luminance/Chrominance
YEL : Yellow

2. DISASSEMBLY

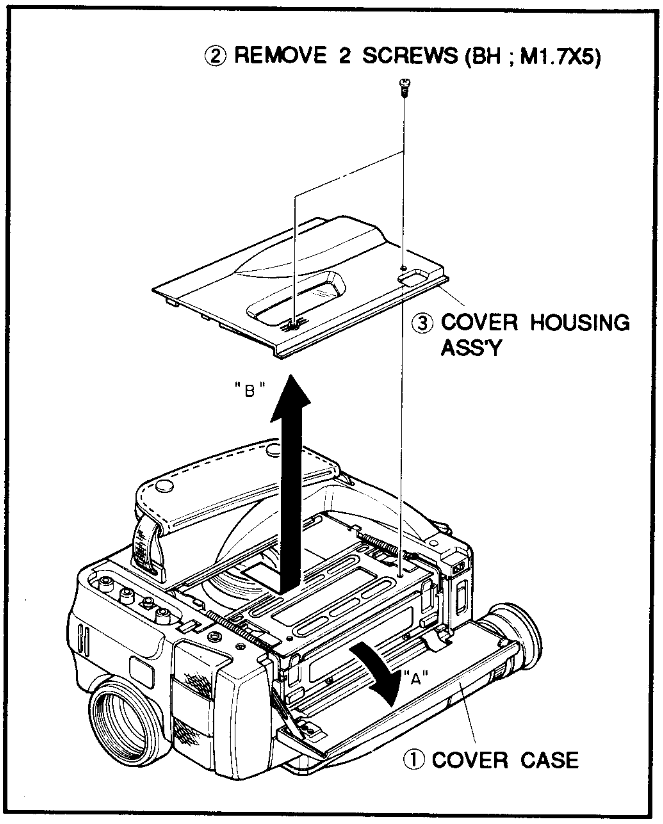
2-1. INSTRUMENT DISASSEMBLY

2-1-1. Cover Housing Ass'y Removal (Fig. 1)

1. Open the cover case ① in the direction of arrow "A".
2. Remove two (2) screws ②.
3. Lift up the cover housing ass'y ③ in the direction of arrow "B".

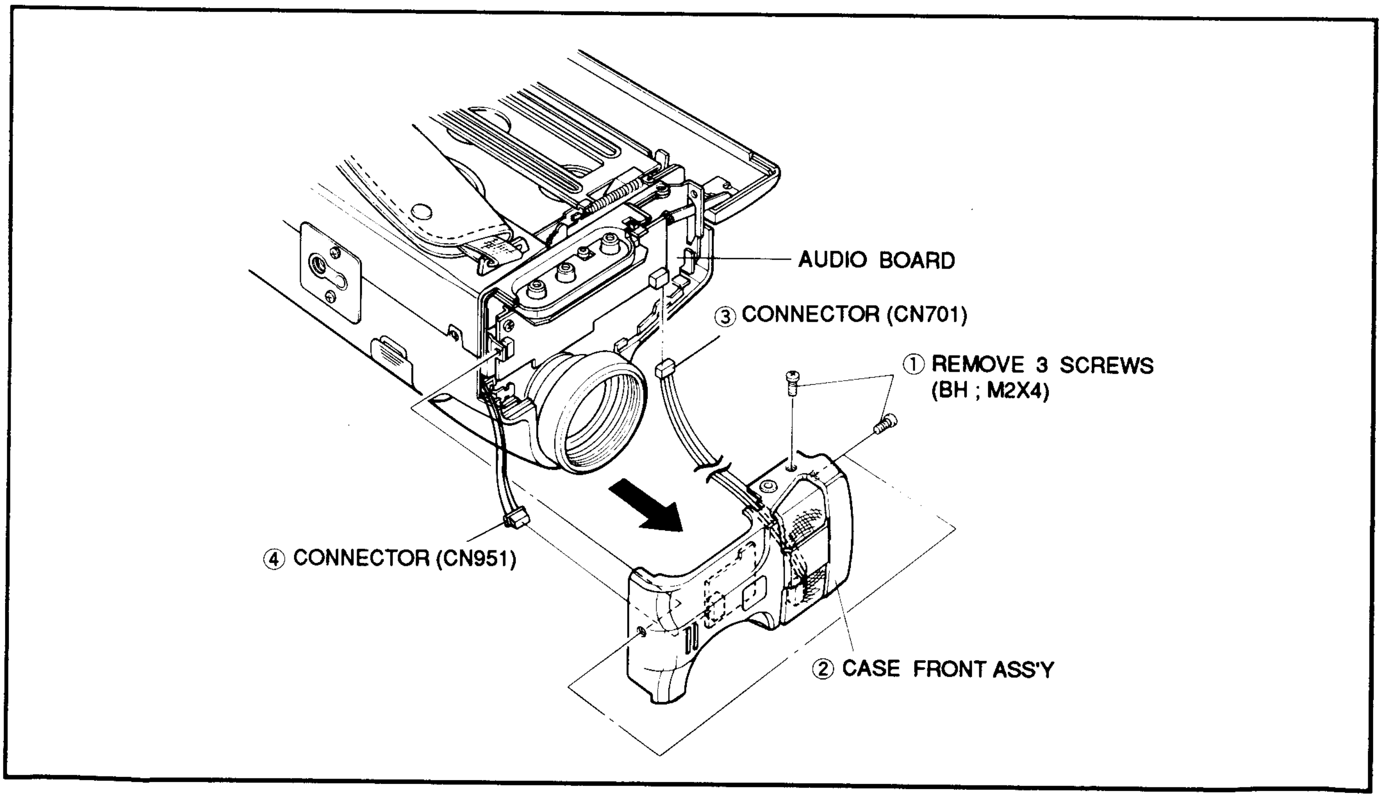
2-1-2. Case-Front Ass'y Removal (Fig. 2)

1. Remove three (3) screws ①.
2. Remove the case front ass'y ② in the direction of arrow.
3. Disconnect connector (CN701) ③ from the Audio Board.
4. Disconnect connector (CN951) ④ from the Remocon Module Board.



② REMOVE 2 SCREWS (BH ; M1.7X5)
③ COVER HOUSING ASS'Y
"B"
"A"
① COVER CASE

Fig. 1 Cover Housing Ass'y Removal



AUDIO BOARD
③ CONNECTOR (CN701)
① REMOVE 3 SCREWS (BH ; M2X4)
④ CONNECTOR (CN951)
② CASE FRONT ASS'Y

Fig. 2 Case-Front Ass'y Removal

2-1-3. Case-Right Ass'y Removal

1. Remove two (2) screws ①.
2. Remove one (1) screw ②.
3. Remove two (2) screws ③.
4. Lift up the case right ass'y ④ in the direction of arrow.
5. Remove the knob dummy ⑤.

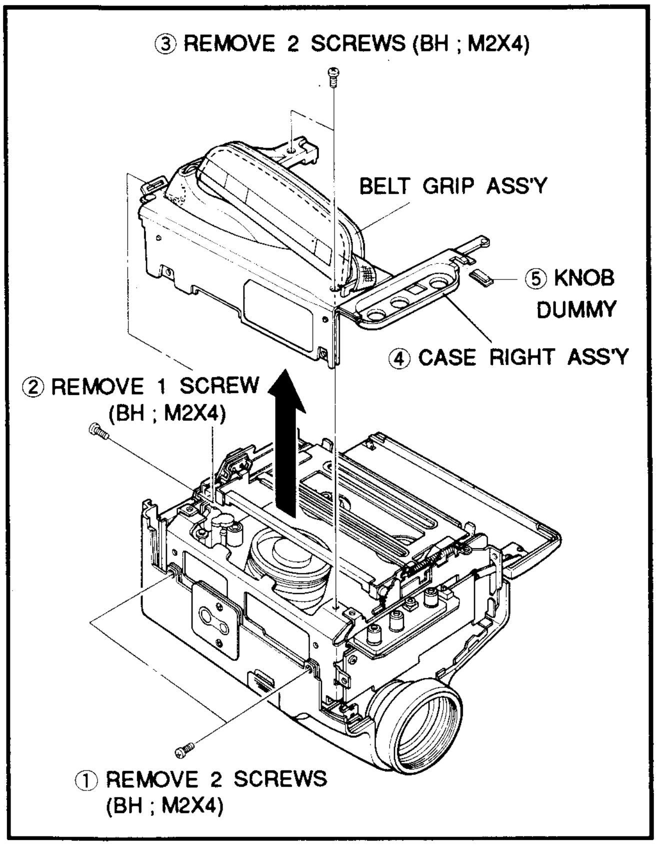

③ REMOVE 2 SCREWS (BH ; M2X4)
BELT GRIP ASS'Y
⑤ KNOB DUMMY
④ CASE RIGHT ASS'Y
② REMOVE 1 SCREW (BH ; M2X4)
① REMOVE 2 SCREWS (BH ; M2X4)

Fig. 3 Case-Right Ass'y Removal

2-1-4. Case-Left Ass'y Removal

1. Disconnect connector (CN204) ① from the VTR Main Board.
2. Disconnect connector (CN702) ② from the Audio Board.
3. Remove one (1) screw ③.
4. Remove two (2) screws ④.
5. Remove the VTR + Camera ass'y ⑤ in the direction of arrow.
6. Disconnect FPC cable ⑥ from Camera Function Board.

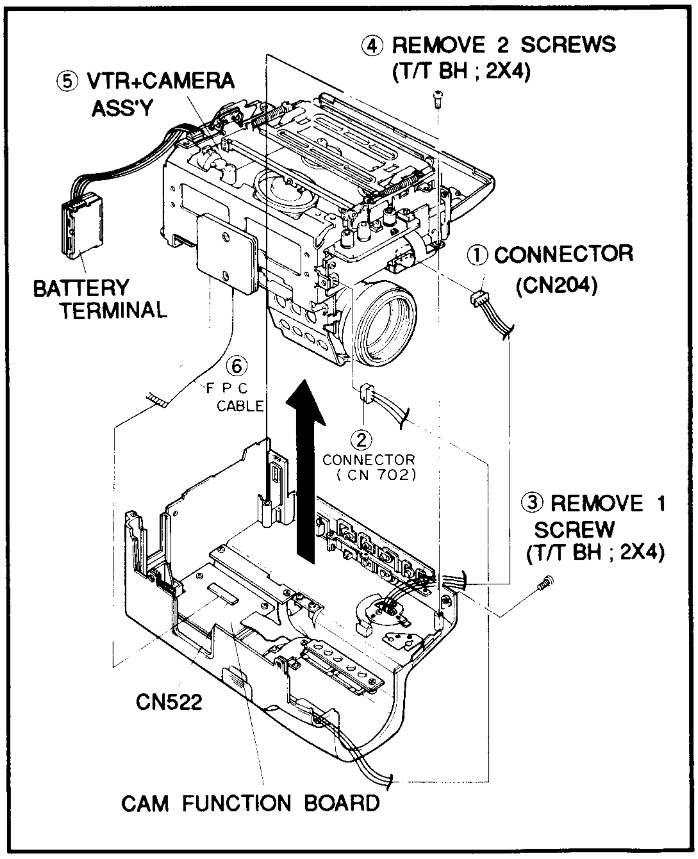

④ REMOVE 2 SCREWS (T/T BH ; 2X4)
⑤ VTR+CAMERA ASS'Y
① CONNECTOR (CN204)
BATTERY TERMINAL
⑥ FPC CABLE
② CONNECTOR (CN 702)
③ REMOVE 1 SCREW (T/T BH ; 2X4)
CN522
CAM FUNCTION BOARD

Fig. 4 Case-Left Ass'y Removal

2-1-5. Camera Function Ass'y Removal (Fig. 5)

1. Disconnect lead connector ① of terminal from Camera Function Board.
2. Remove three (3) screws ②.
3. Remove two (2) screws ③.
4. Remove three (3) screws ④.
5. Remove the Camera Function Board ⑤.

2-1-6. Cover-Case Ass'y Removal (Fig. 6)

1. Remove the Holder Start/Stop ①.
2. Remove one (1) screw ②.
3. Remove three (3) screws ③.
4. Remove the Cover case ass'y ④ by releasing connector.

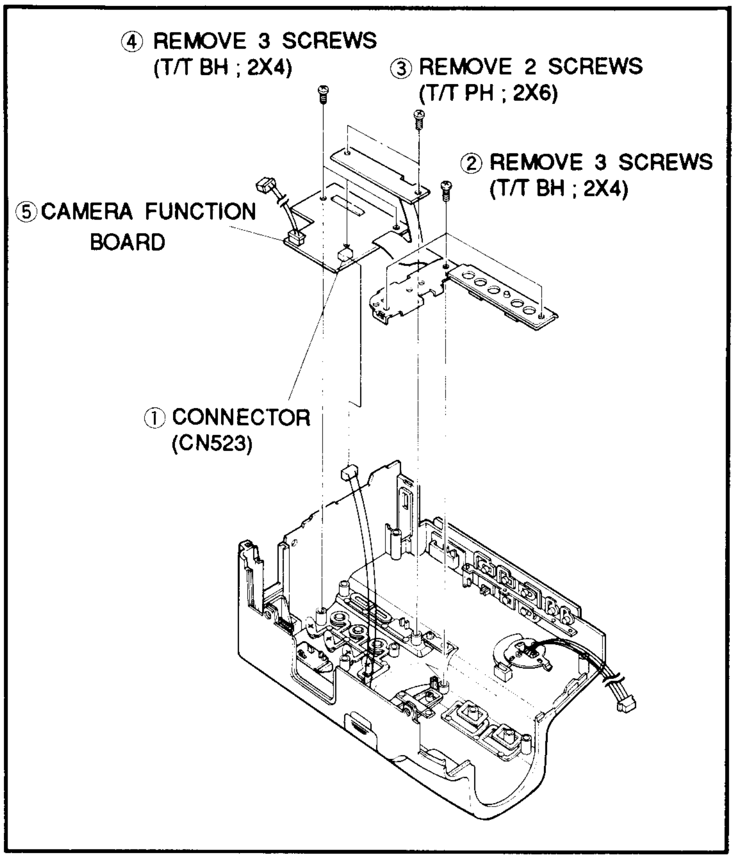

④ REMOVE 3 SCREWS
(T/T BH ; 2X4)
③ REMOVE 2 SCREWS
(T/T PH ; 2X6)
② REMOVE 3 SCREWS
(T/T BH ; 2X4)
⑤ CAMERA FUNCTION
BOARD
① CONNECTOR
(CN523)

Fig. 5 Camera Function Ass'y Removal

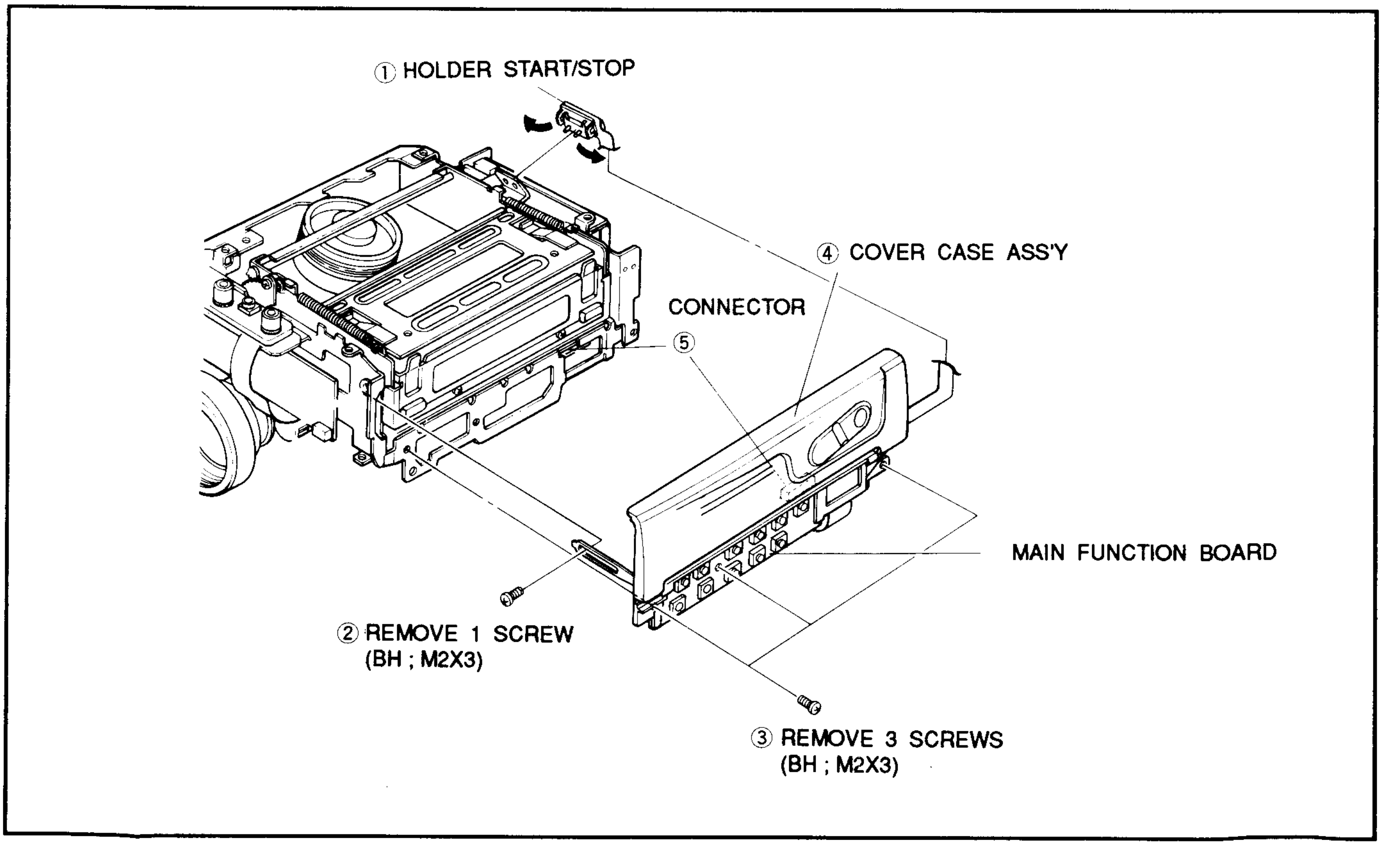

① HOLDER START/STOP
④ COVER CASE ASS'Y
CONNECTOR
⑤
MAIN FUNCTION BOARD
② REMOVE 1 SCREW
(BH ; M2X3)
③ REMOVE 3 SCREWS
(BH ; M2X3)

Fig. 6 Cover-Case Ass'y Removal

2-1-7. DC/DC Converter Ass'y Removal (Fig. 7)

1. Disconnect connector ① from DC/DC Converter Ass'y.
2. Disconnect connector ② from DC/DC Converter Ass'y.
3. Remove one (1) screw ③.
4. Remove the DC/DC Converter Ass'y ④ in the direction of arrow.

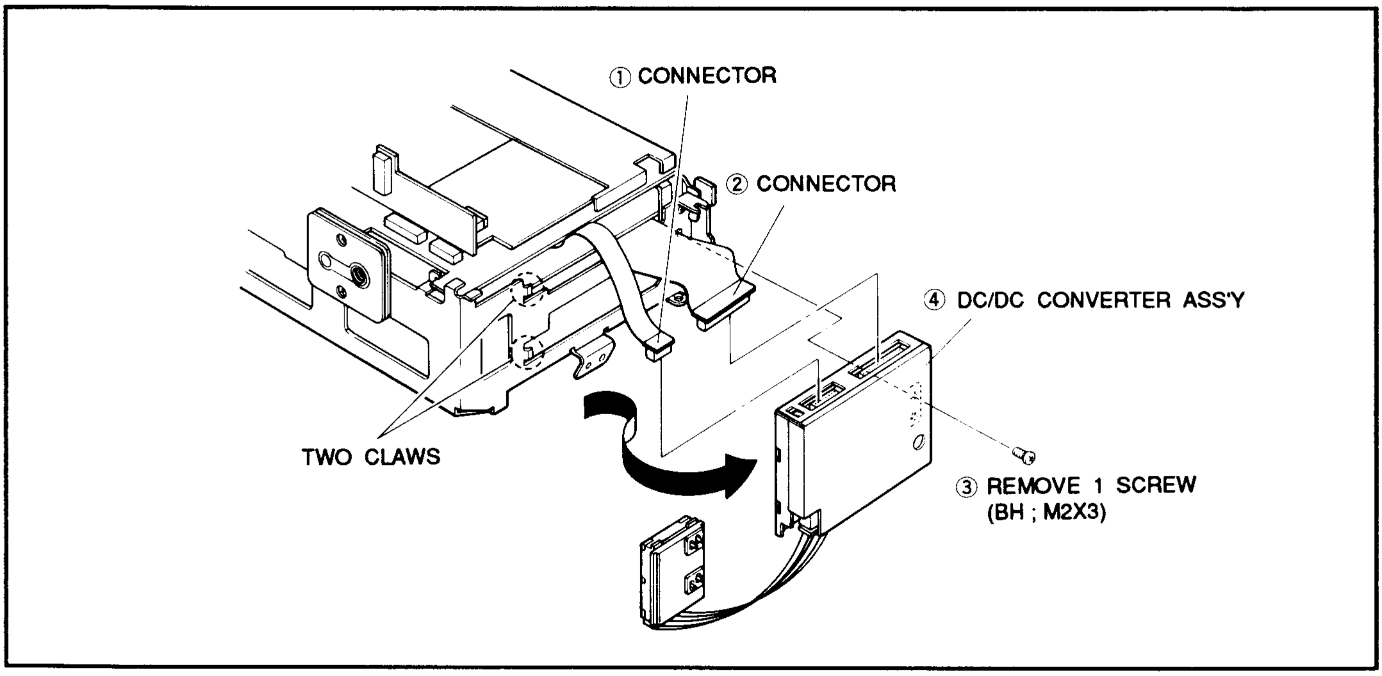

① CONNECTOR
② CONNECTOR
④ DC/DC CONVERTER ASS'Y
TWO CLAWS
③ REMOVE 1 SCREW
(BH ; M2X3)

Fig. 7 DC/DC Converter Ass'y Removal

2-1-8. Camera Block Removal (Fig. 8)

1. Remove one (1) screw ①.
2. Remove two (2) screws ②.
3. Remove three (3) screws ③.
4. Remove the Camera Block ④ in the direction of arrow.
5. Disconnect connector ⑤ from CN401 of the VTR Main Board.
6. Disconnect connector ⑥ from the CN302 of the Camera Block.

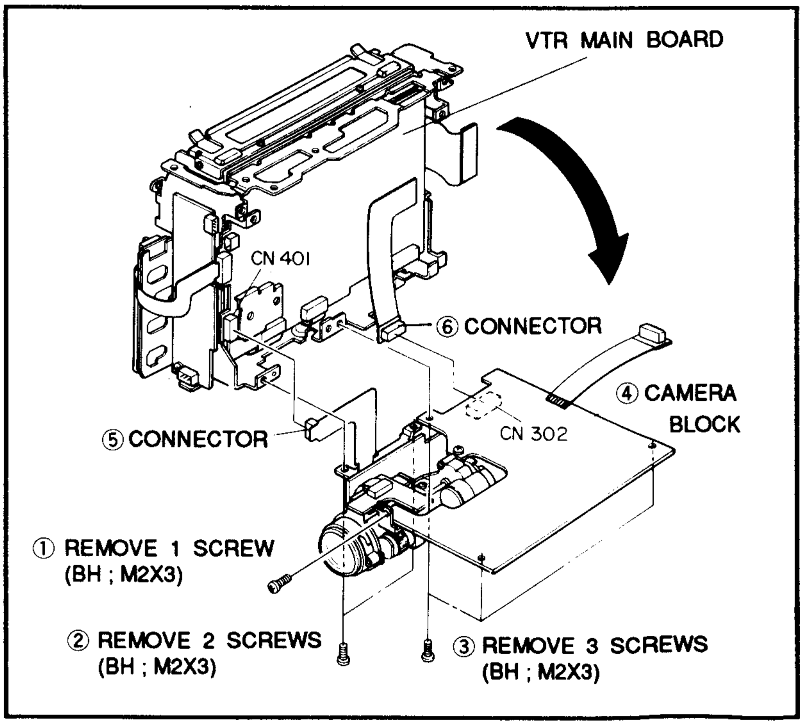

VTR MAIN BOARD
CN 401
⑥ CONNECTOR
④ CAMERA
BLOCK
CN 302
⑤ CONNECTOR
① REMOVE 1 SCREW
(BH ; M2X3)
② REMOVE 2 SCREWS
(BH ; M2X3)
③ REMOVE 3 SCREWS
(BH ; M2X3)

Fig. 8 Camera Block Removal

2-1-9. Lens Ass'y Removal (Fig. 9)

1. Remove the super impose board ① by releasing connector ⓐ and ⓑ.
2. Remove two (2) screws ②.
3. Remove the Lens Ass'y ③ from the Camera Main Board by releasing connector ⓒ and then, remove the solder point and ⓓ.
4. Remove the Lens Drive Board ④ by releasing FPC from connector ⓕ.
5. Remove three (3) screws ⑤.

2-1-10. Frame Removal from VTR Ass'y (Fig. 10)

1. Disconnect FPC ① of A/V JACK from VTR Main Board.
2. Remove one (1) screw ② holding the Audio Board then remove the Audio Board.
3. Remove two (2) screws ③.
4. Remove one (1) screw ④.
5. Remove one (1) screw ⑤.
6. Remove one (1) screw ⑥.
7. Remove the frame ⑦ in the direction of arrow.

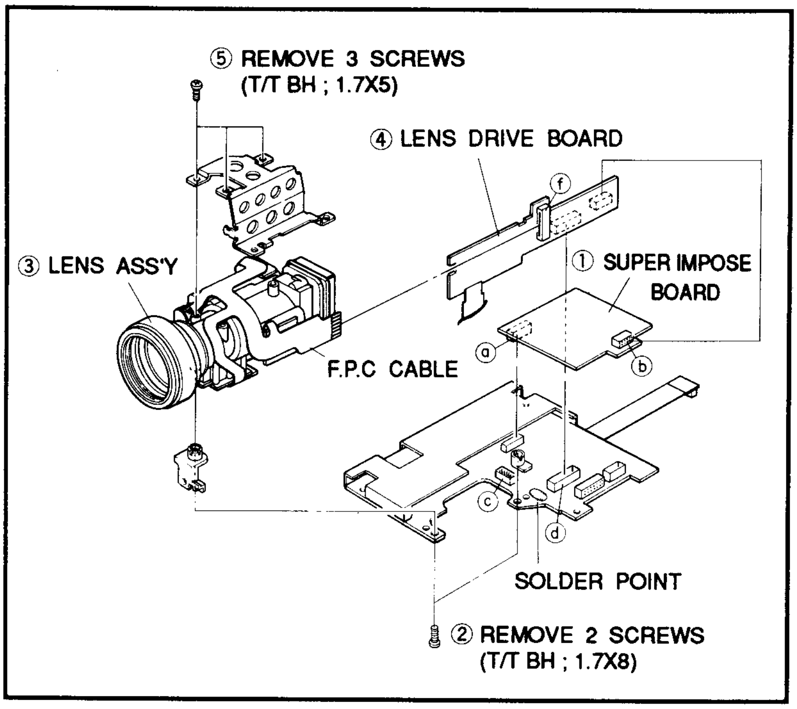

⑤ REMOVE 3 SCREWS
(T/T BH ; 1.7X5)
④ LENS DRIVE BOARD
ⓕ
③ LENS ASS'Y
① SUPER IMPOSE BOARD
F.P.C CABLE
ⓐ
ⓑ
ⓒ
ⓓ
SOLDER POINT
② REMOVE 2 SCREWS
(T/T BH ; 1.7X8)

Fig. 9 Lens Ass'y Removal

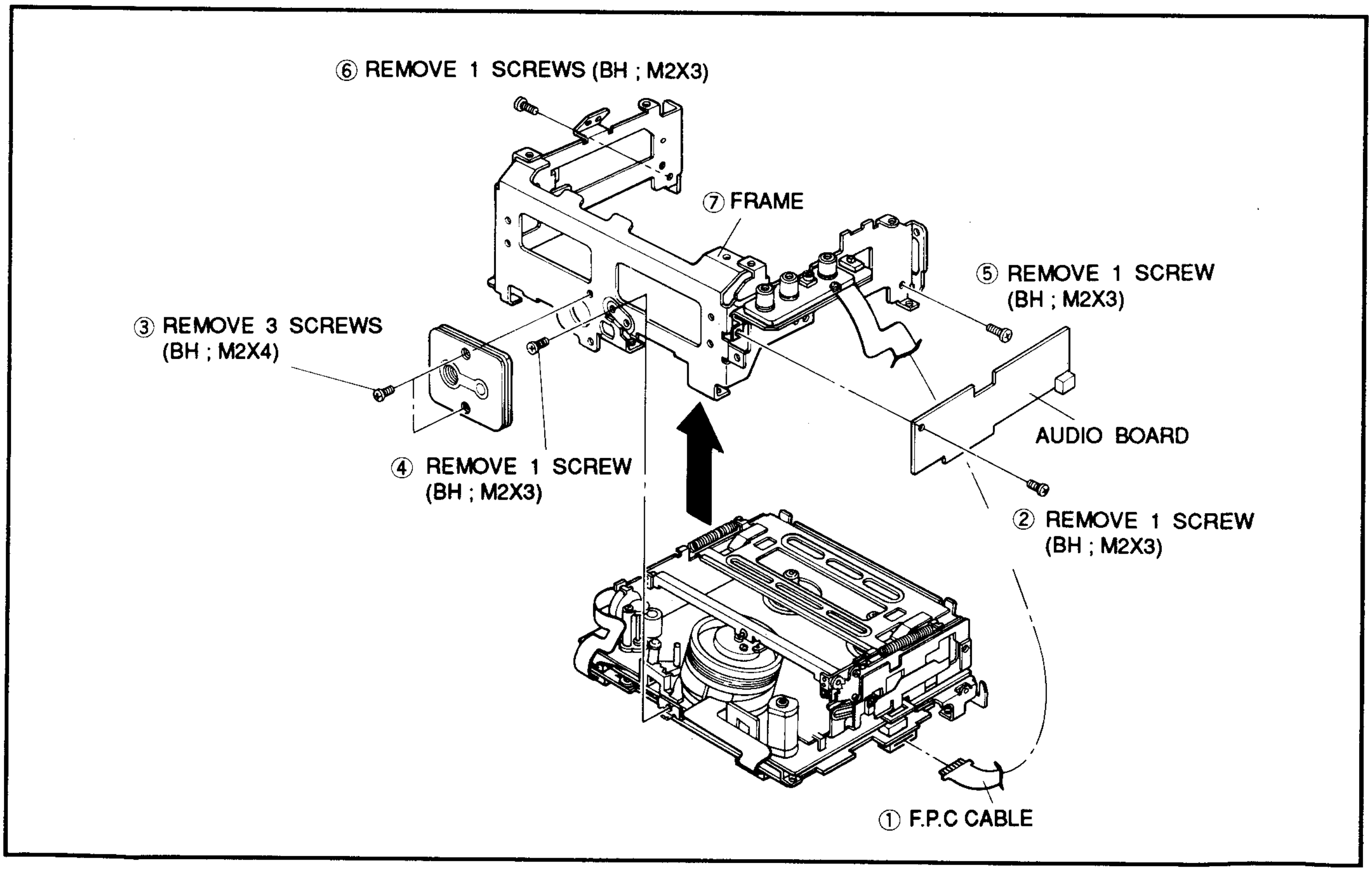

⑥ REMOVE 1 SCREWS (BH ; M2X3)
⑦ FRAME
⑤ REMOVE 1 SCREW
(BH ; M2X3)
③ REMOVE 3 SCREWS
(BH ; M2X4)
AUDIO BOARD
④ REMOVE 1 SCREW
(BH ; M2X3)
② REMOVE 1 SCREW
(BH ; M2X3)
① F.P.C CABLE

Fig. 10 Frame Removal from VTR Ass'y

2-1-11. VTR Main Board Removal (Fig. 11)

1. Remove two (2) screws ①.
2. Lift up the VTR Board ② in the direction of arrow.
3. Disconnect seven (7) connectors ⓐ, ⓑ, ⓒ, ⓓ, ⓔ, ⓕ, ⓖ.

2-1-12. EVF Ass'y Removal (Fig. 12)

1. Remove two (2) screws ①.
2. Remove the EVF Ass'y ② in the direction of arrow "A".
3. Remove the EVF Lens Ass'y ③ by pulling out to the position of the marking - off line and turning in the direction of arrow "B".
4. Remove two (2) screws ④.
5. Remove the Case-Left EVF Ass'y ⑤.
6. Remove the CRT Ass'y ⑥.
7. Remove one (1) screw ⑦.
8. Remove the EVF Board ⑧.

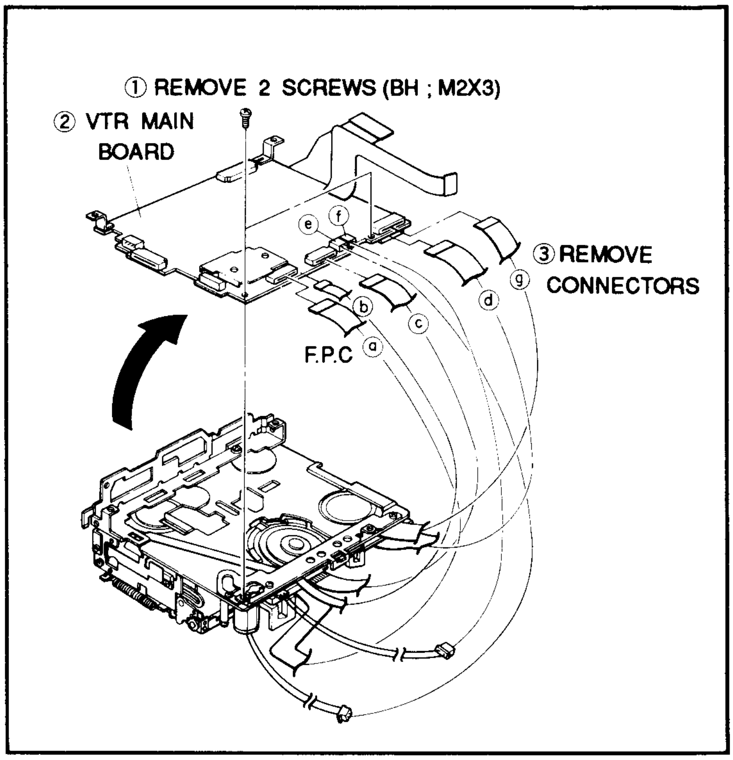

① REMOVE 2 SCREWS (BH ; M2X3)
② VTR MAIN BOARD
ⓔ
ⓕ
③ REMOVE CONNECTORS
ⓖ
ⓓ
ⓑ
ⓒ
F.P.C ⓐ

Fig. 11 VTR Main Board Removal

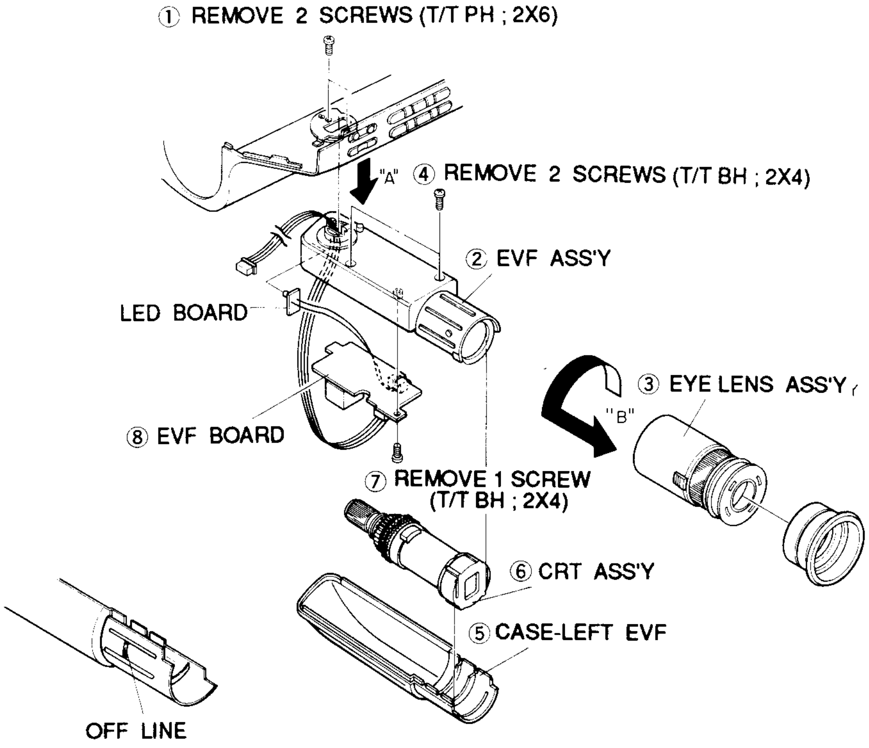
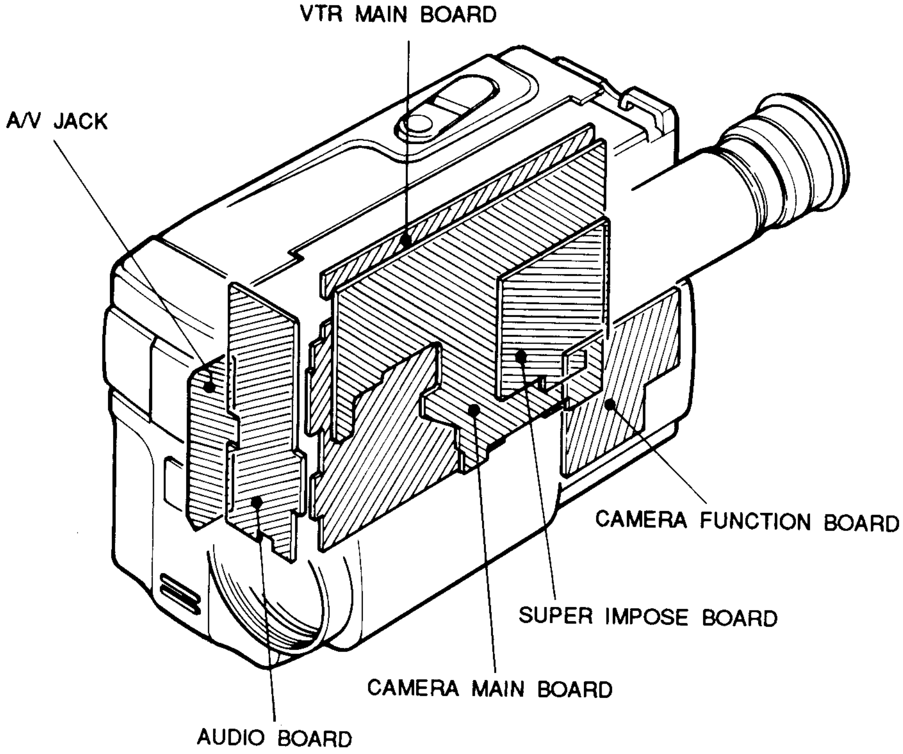
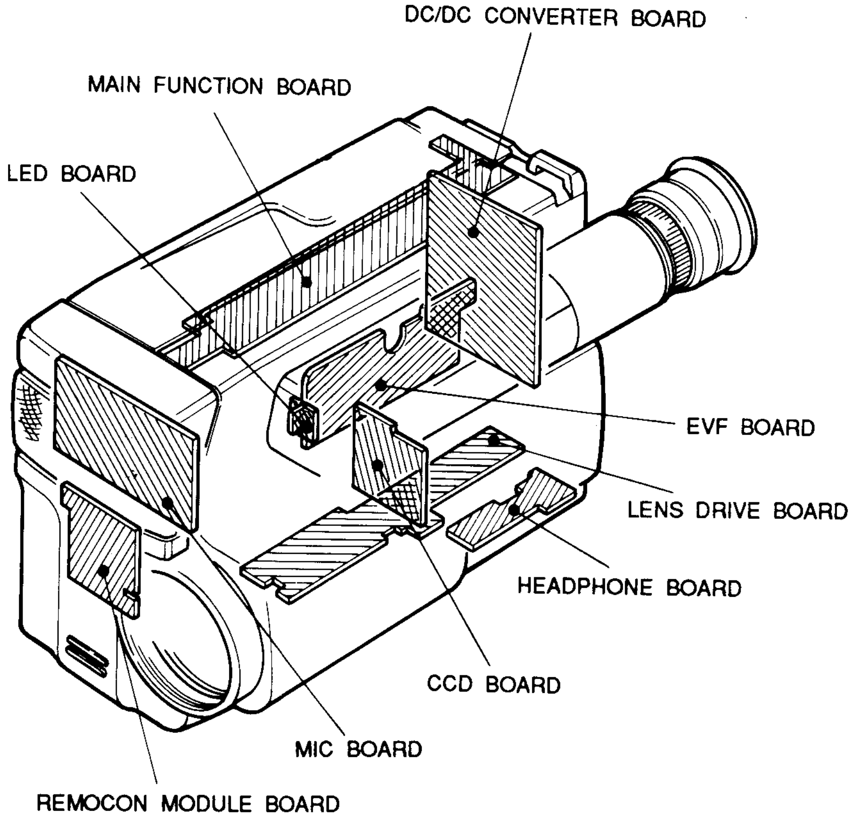

① REMOVE 2 SCREWS (T/T PH ; 2X6)
"A"
④ REMOVE 2 SCREWS (T/T BH ; 2X4)
② EVF ASS'Y
LED BOARD
③ EYE LENS ASS'Y
"B"
⑧ EVF BOARD
⑦ REMOVE 1 SCREW (T/T BH ; 2X4)
⑥ CRT ASS'Y
⑤ CASE-LEFT EVF
OFF LINE

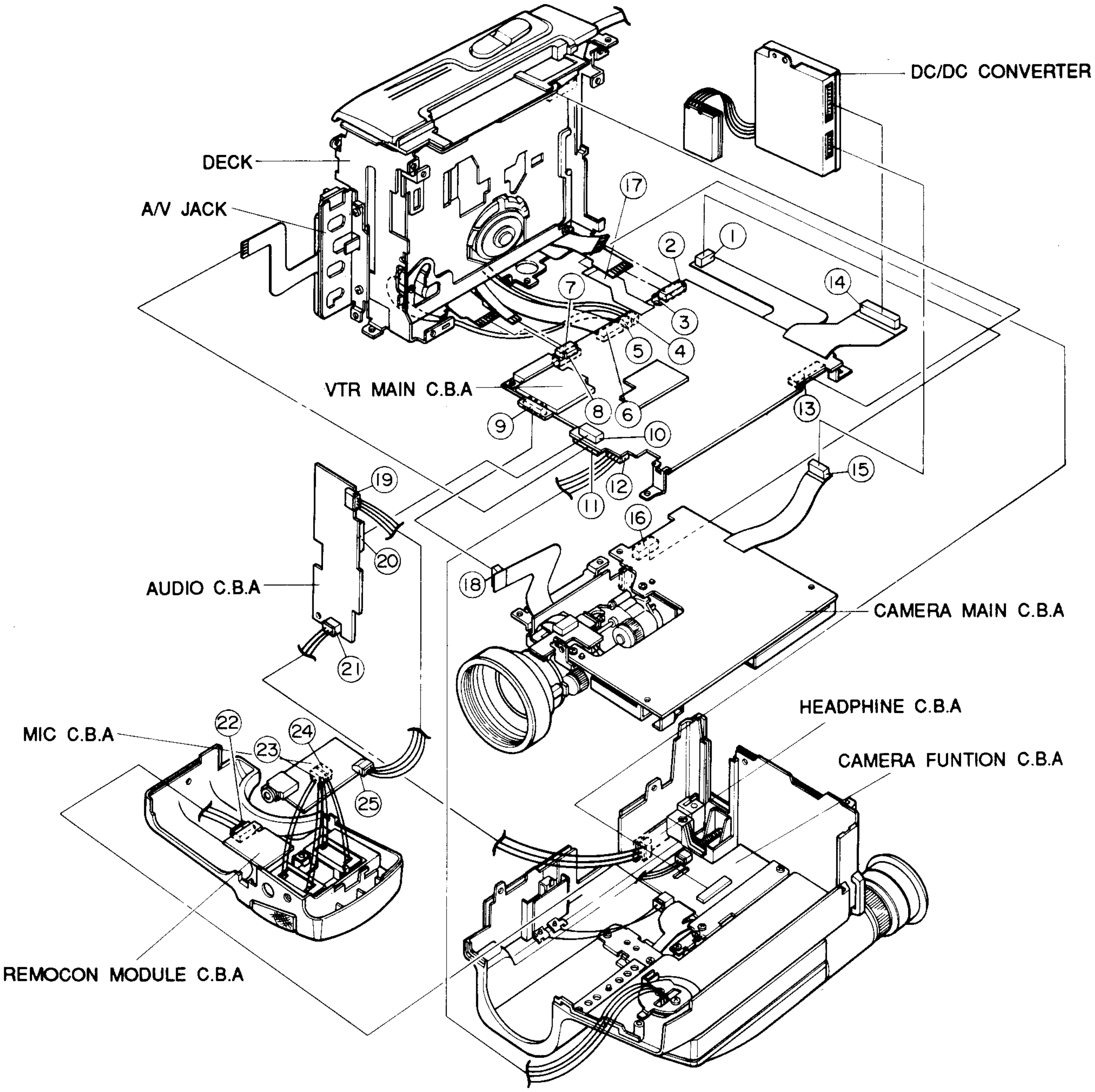
Fig. 12 EVF Ass'y Removal

2-1-13. Circuit Boards Location


VTR MAIN BOARD
A/V JACK
CAMERA FUNCTION BOARD
SUPER IMPOSE BOARD
CAMERA MAIN BOARD
AUDIO BOARD


DC/DC CONVERTER BOARD
MAIN FUNCTION BOARD
LED BOARD
EVF BOARD
LENS DRIVE BOARD
HEADPHONE BOARD
CCD BOARD
MIC BOARD
REMOCON MODULE BOARD

2-1-14. Diagram of Connectors Connection


DC/DC CONVERTER
DECK
A/V JACK
VTR MAIN C.B.A
AUDIO C.B.A
CAMERA MAIN C.B.A
HEADPHINE C.B.A
CAMERA FUNTION C.B.A
MIC C.B.A
REMOCON MODULE C.B.A
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
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NO	CONNECTOR WAFER LOCA-NO	DIRECTION →	LEAD CONNECTOR ASS'Y LOCA-NO	CONNECTOR WAFER LOCA-NO
1	W604	TO CAM MAIN C.B.A		CN304
2	CN511	TO CAPSTAN MOTOR		
3	CN505	TO DECK		
4	CN507	TO DEW SENSOR		
5	CN506	TO LOADING MOTOR		
6	CN510	TO DRUM MOTOR		
7	CN504	TO MODE S/W		
8	CN101	TO ROTARY TRANS		
9	CN401	TO CAM LENS DRIVE C.B.A		
10	CN203	TO AUDIO C.B.A		CN703
11	CN201	TO A/V JACK ASS'Y		
12	CN204	TO E.V.F C.B.A		
13	CN502	TO MAIN FUNCTION C.B.A		CN961
14	CN501	TO DC/DC CONVERTER		CN903
15	FP101	TO DC/DC CONVERTER	(CN902)	CN902
16	CN304	TO VTR MAIN C.B.A	(W604)	
17	CN509	TO CAMERA FUNCTION C.B.A	(CN522)	
18	FP401	TO VTR MAIN C.B.A	(CN401)	
19	CN701	TO MIC C.B.A	(CN803)	
20	CN703	TO VTR MAIN C.B.A		CN203
21	CN702	TO HEADPHONE C.B.A	(CN941)	
22	CN951	TO CAMERA FUNCTION C.B.A	(CN503)	
23	CN802	TO ELECTRIC CONDENSOR MICRO PHONE "R"		
24	CN801	TO ELECTRIC CONDENSOR MICRO PHONE "L"		
25	CN803	FROM MIC C.B.A	(CN701)	

2-2. MECHANICAL PARTS LOCATIONS

2-2-1. Main Deck (Top View)

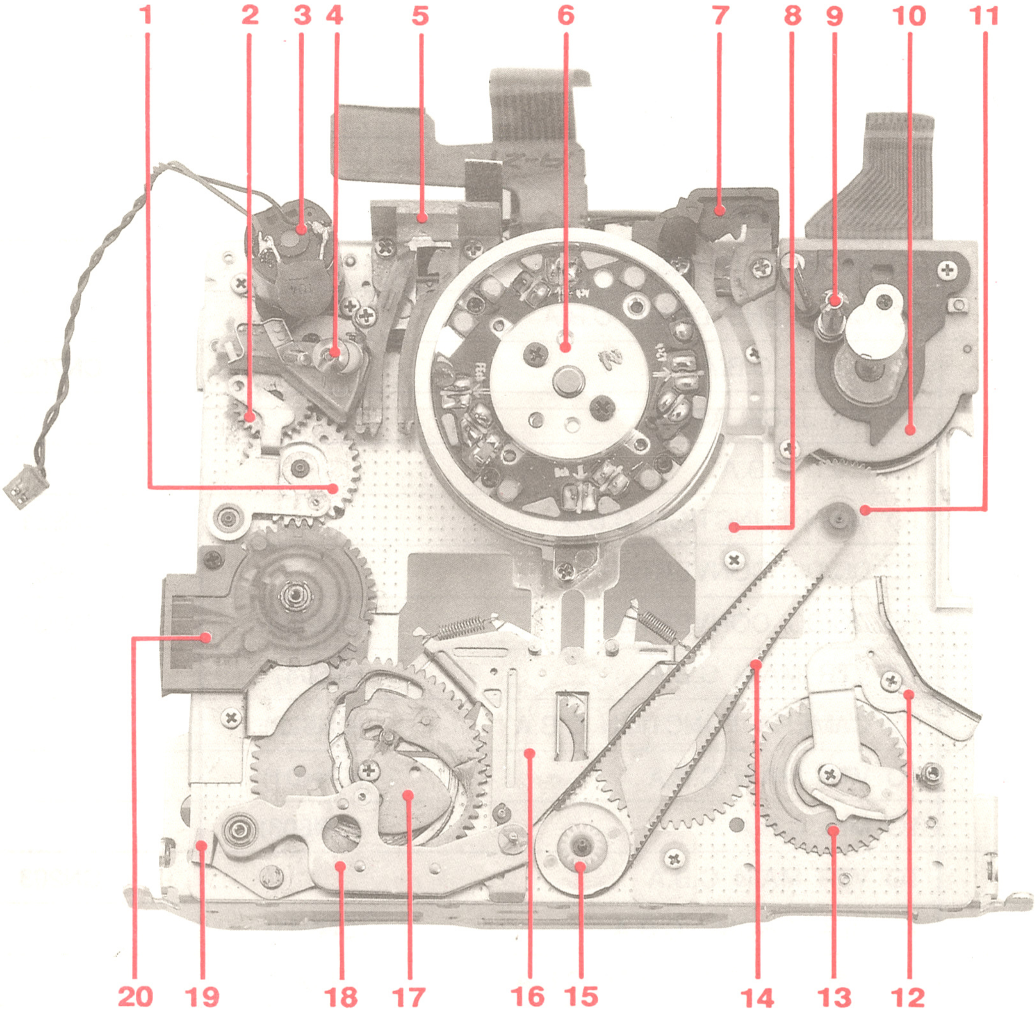


Fig. 1 Main Deck (Top View)

1. GEAR-CAM TENSION
2. GEAR-LOADING B
3. LOADING-MOTOR
4. POLE-BASE SUB ASS'Y
5. RAIL-STOPPER L
6. ASS'Y-SEMI DRUM
7. GUIDE-TAPE T
8. COVER-TIMING BELT
9. BASE-CAPSTAN ASS'Y
10. MOTOR CAPSTAN
11. GEAR-CAPSTAN ASS'Y
12. LEVER-CAM PINCH ASS'Y
13. GEAR-CAM PINCH
14. BELT-TIMING
15. GEAR-PULLEY ASS'Y
16. PLATE-SLIDER ASS'Y
17. GEAR-CAM MAIN
18. LEVER-CAM ASS'Y
19. LEVER-EJECT
20. SWITCH-MODE ASS'Y

2-2-2. Sub Deck (Top View)

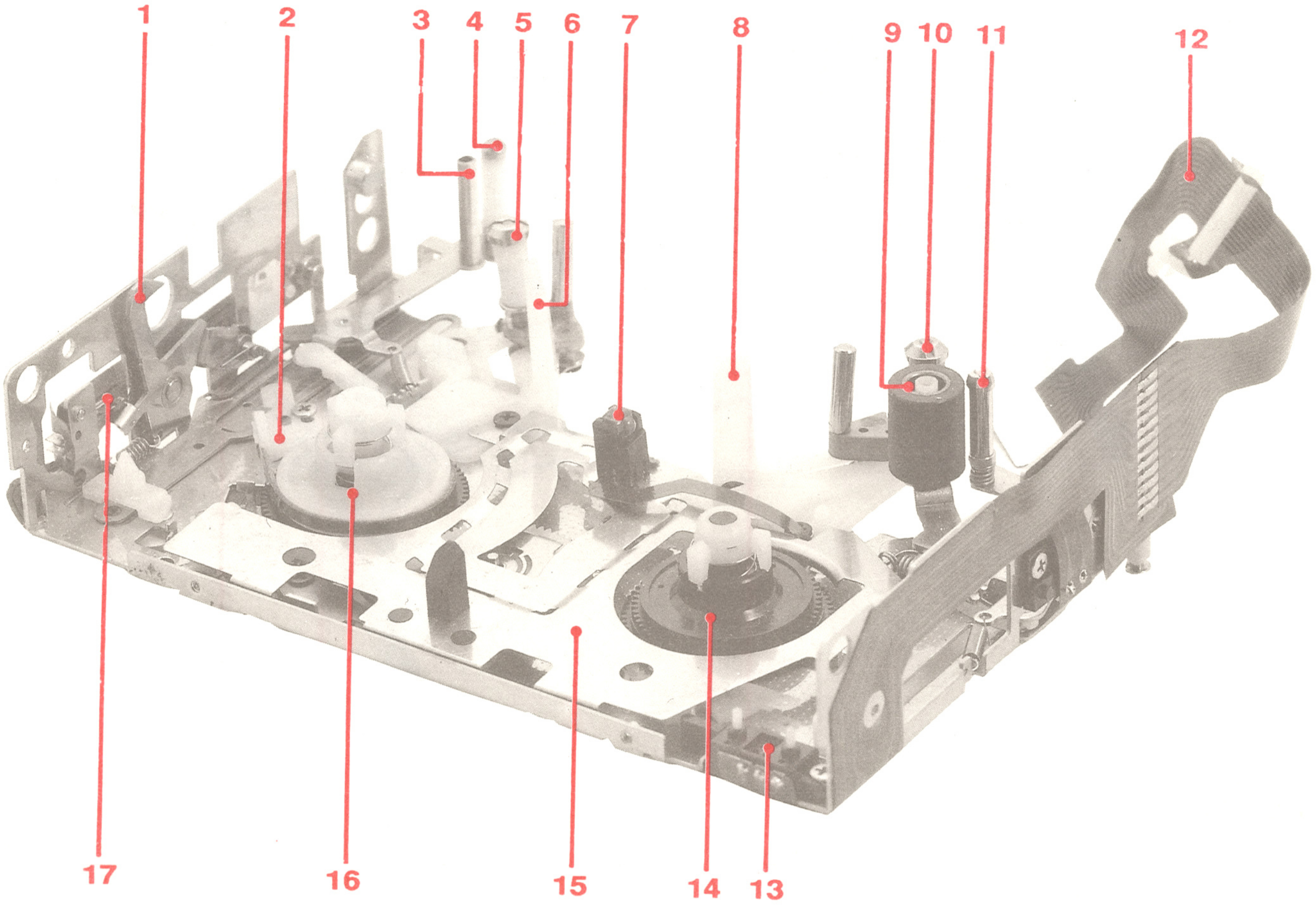


Fig. 2 Sub Deck (Top View)

1. SUB-CHASSIS
2. HOLDER-TENSION BAND ASS'Y
3. ARM-TENSION ASS'Y
4. LEVER-GUIDE ASS'Y
5. ARM-POLE BASE S ASS'Y
6. RAIL-GUIDE S
7. LED-IR
8. RAIL-GUIDE T
9. ARM-PINCH R ASS'Y
10. ARM-POLE BASE T ASS'Y
11. ARM-REVIEW ASS'Y
12. ASS'Y-FPC SUB CHASSIS
13. SW-DETECTOR
14. REEL-T ASS'Y
15. COVER-REEL ASS'Y
16. REEL-S ASS'Y
17. SW-LEAF

2-2-3. Housing Ass'y

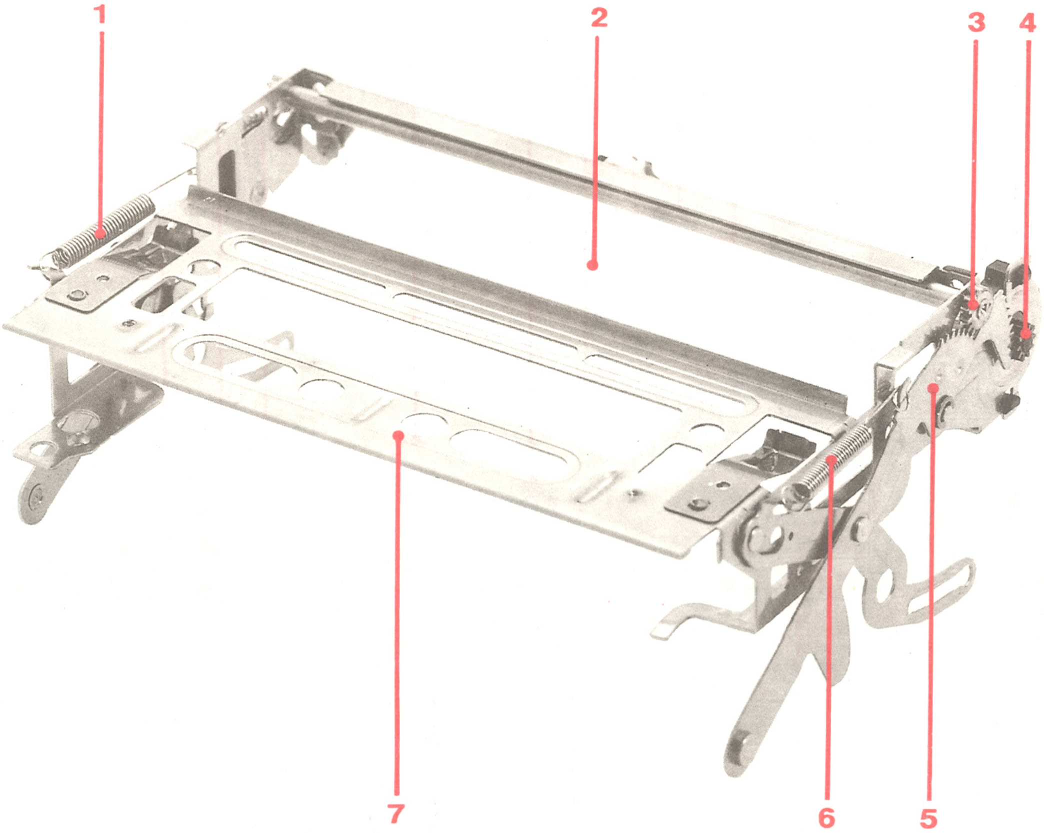


Fig. 3 Housing Ass'y

1. SPRING EJECT L
2. LEVER-D. PROTECT ASS'Y
3. SHAFT-HOUSING ASS'Y
4. DAMPER-HOUSING
5. ARM-GEAR R
6. SPRING EJECT R
7. HOUSING-PLATE ASS'Y

2-3. OPERATING INSPECTION AND ADJUSTMENT OF DRIVING PART

2-3-1. Ready for Operation

1. Make sure Main Power S/W is turned off.
2. Connect lead connector and F.P.C to VTR Main Board.
3. Turn the Main Power S/W on.
4. Load a tape and make sure that Auto Loading is working.
5. Confirm the stop mode.
6. Check the Deck movement with pressing PLAY, FF and REW key.
7. Press the Eject (Stop) Key.

2-3-2. Deck Operation without Housing Ass'y & Tape

1. Cover the LED assembly with an Opaque Cap ①, etc.
2. Push the Lever Stopper ③ in the dirrection of arrow "A" in order to turn the S/W Leaf ② on.
   (Refer to Fig. A)
3. Install Rubber Band ④ to Reel S, T for confirming PLAY mode movement.
4. Follow the procedures for Ready for operation.

> **Note** : Push the Lever Locker ⑤ in the direction of arrow "A" in order to eject the tape compulsorily under the condition of Housing loaded.

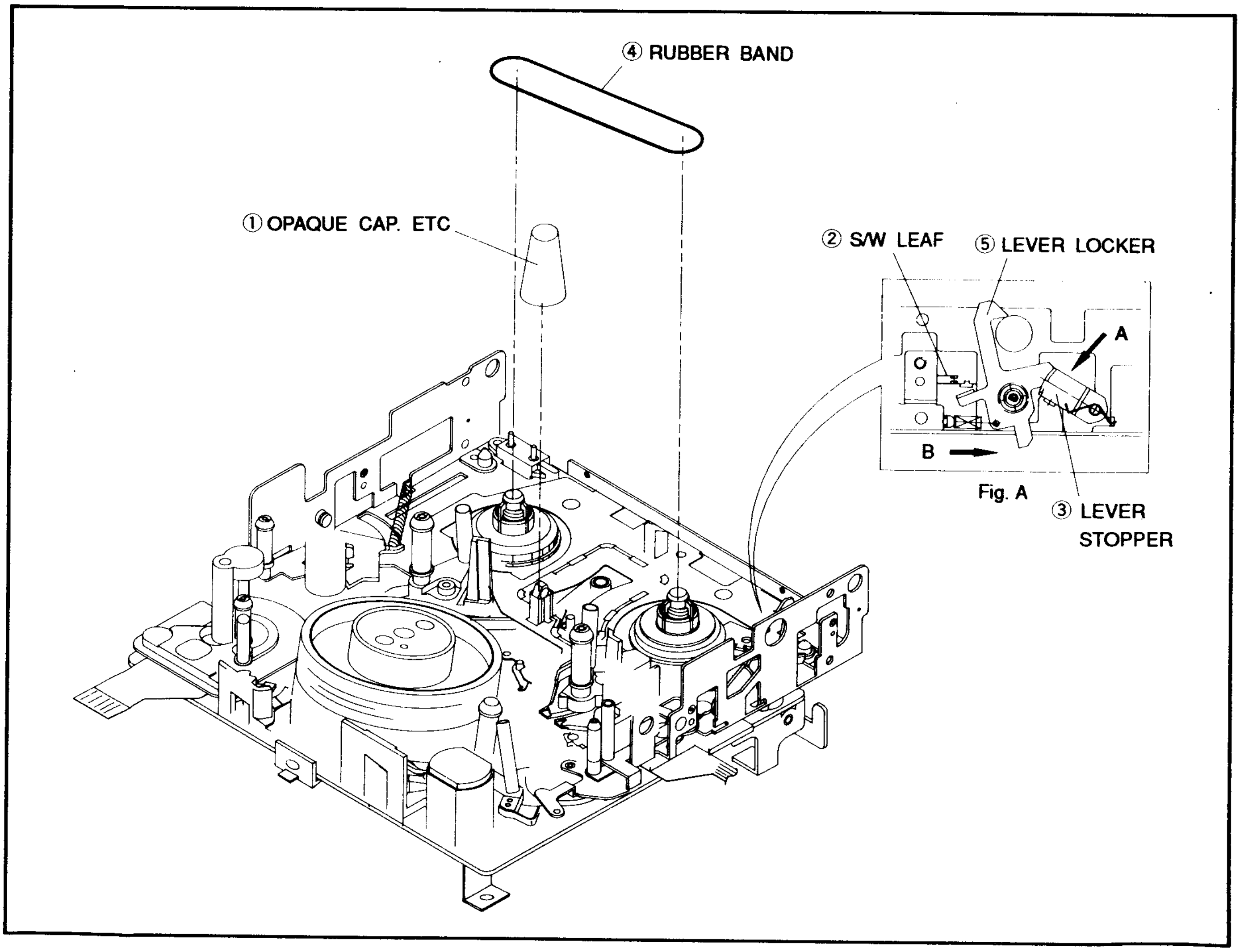


Fig. 4

2-4. MECHANICAL BLOCK REPLACEMENT & CHECK

2-4-1. Housing Ass'y

1. Removal

Note : Be sure to remove the Housing Ass'y when Housing is ejected.

1) Remove four (4) screws ① then remove the Cover Back ②.
2) Remove two (2) Pin Hinges ③ and then remove the Lever Slide ④ as described in Fig. A.

2. Installation

1) Mount the Lever Slide ④ to pin as described in Fig. A.
2) Mount the Pin Hinge ③ to the groove with pushing the Housing ⑤ in the direction of arrow A.
3) Assemble the Cover Back ② as described in Fig. B, then fasten four (4) screws ①.

Note : After assembling, make sure Housing Ass'y is performed properly by installing Housing.

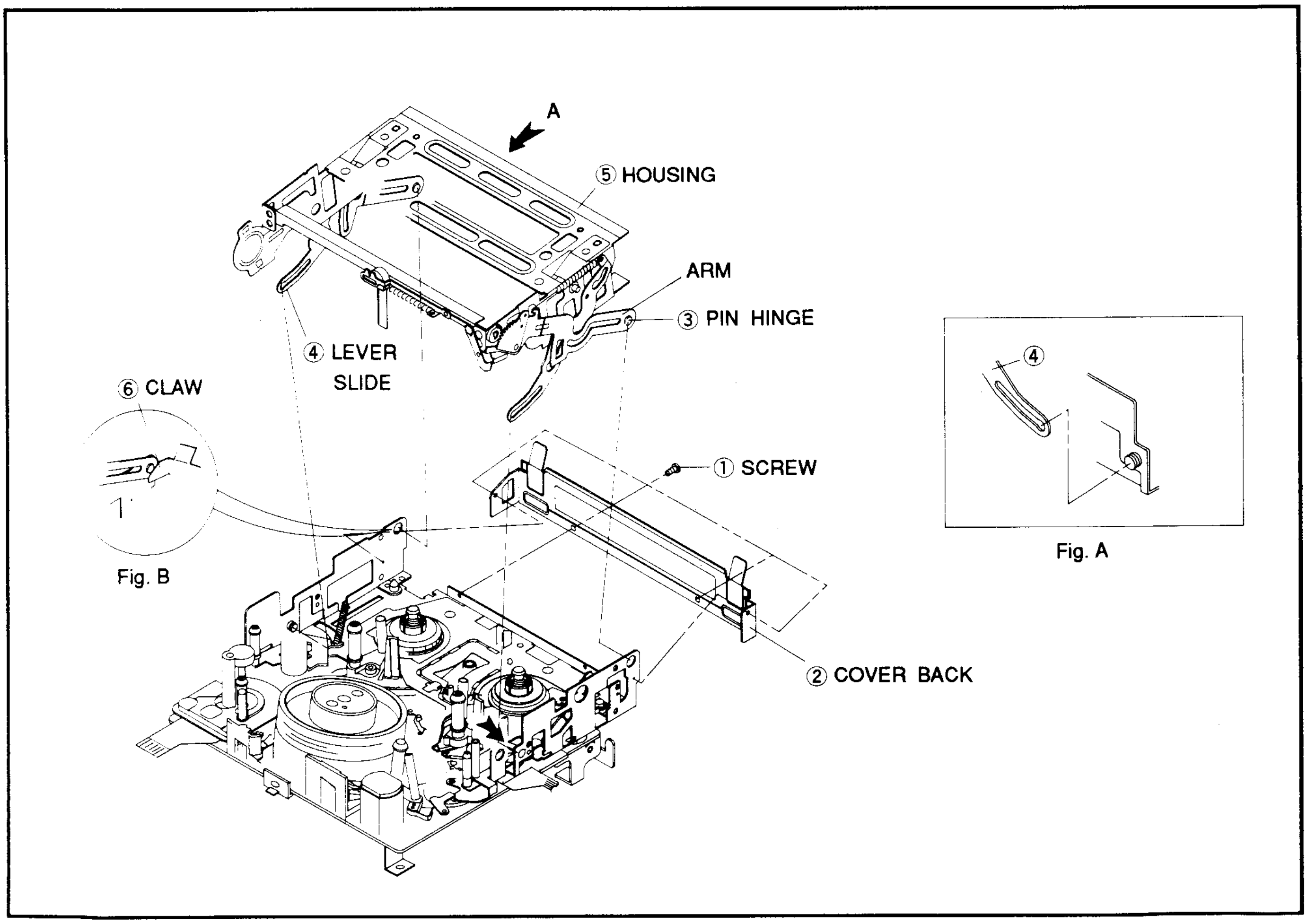

A
⑤ HOUSING
ARM
③ PIN HINGE
④ LEVER SLIDE
⑥ CLAW
① SCREW
② COVER BACK
④
Fig. A
Fig. B

Fig. 5

2-4-2. Drum Ass'y

1. Removal

> **Note :**
> 1) When removing the Drum Ass'y ⑩ from the mechanism chassis, take care not to cut the Flexible Board ⑪.
> 2) Take extreme care when removing the Drum Ass'y ⑩. Do not touch the Head Tip ⑫ during servicing.

1) Remove the Housing Ass'y. (Refer to section 2-4-1)
2) Remove one (1) screw ①, then remove the Guide Tape T ②.
3) Remove three (3) screws ③, ④, ⑤, then remove the Base Drum ⑥.
4) Remove one (1) screw ⑦, then remove the Earth Brush ⑧.
5) Remove two (2) screws ⑨, then remove the Drum Ass'y ⑩.

2. Installation

1) Mount the Drum Ass'y ⑩ to the Boss ⑬ of Base Drum ⑥ and secure two (2) screws ⑨.
2) Mount the Earth Brush ⑧ then secure one (1) screw ⑦.
3) Mount the Base Drum ⑥ to the Main Deck and then secure three (3) screws ③, ④, ⑤.
4) Mount the Guide Tape T ② and then secure one (1) screw ①.

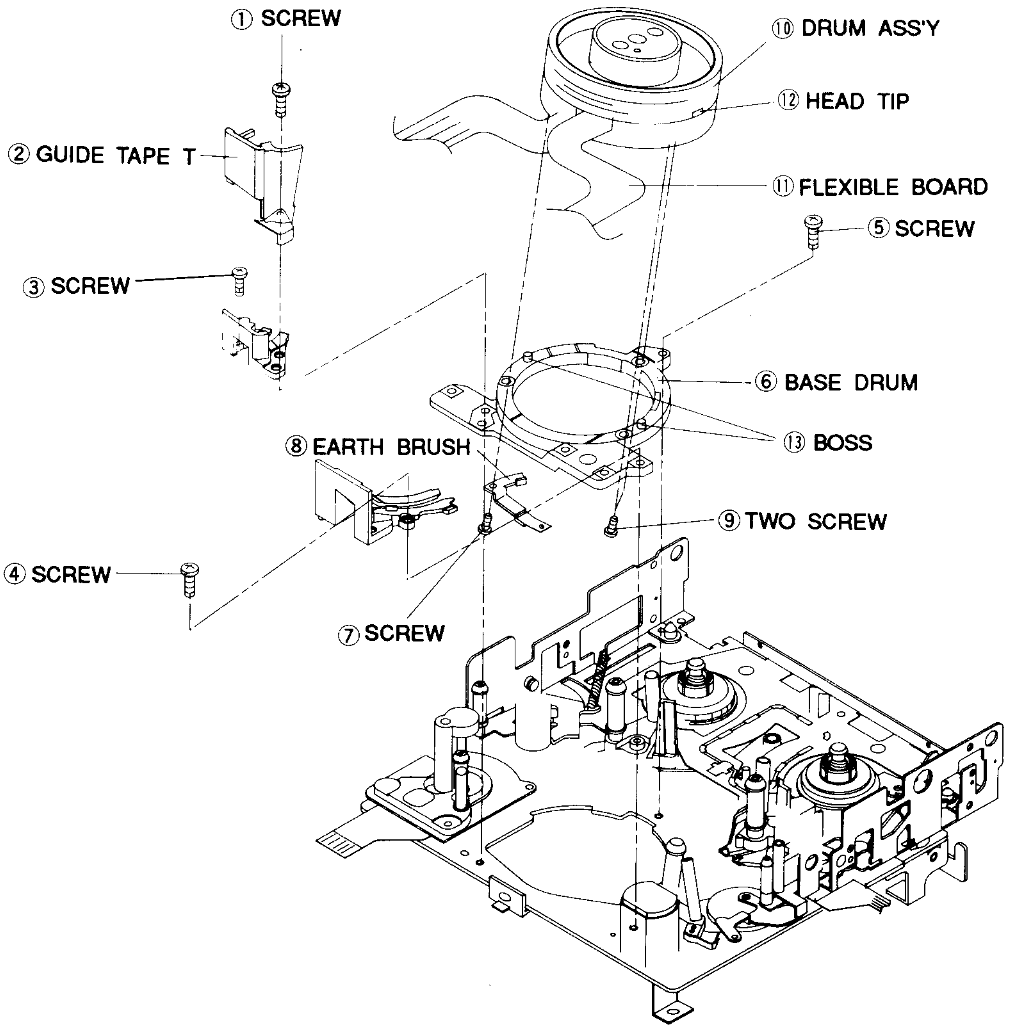

① SCREW
⑩ DRUM ASS'Y
⑫ HEAD TIP
② GUIDE TAPE T
⑪ FLEXIBLE BOARD
⑤ SCREW
③ SCREW
⑥ BASE DRUM
⑧ EARTH BRUSH
⑬ BOSS
⑨ TWO SCREW
④ SCREW
⑦ SCREW

Fig. 6

2-4-3. Idler Ass'y

1. Removal

1) Remove two (2) screws ① and then remove the Cover Reel ③ from the Deck.
2) Take out the Holder LED ② from the Cover Reel ③.
3) Remove the Washer Slit ④ from Idler Ass'y ⑤ and then remove the Idler Ass'y ⑤ from the Pin ⑥.

2. Installation

1) Fit the Idler Ass'y ⑤ into the Pin ⑥, and then install it with the Washer Slit ④.
2) Mount the Cover Reel ③ to the Deck Ass'y.
3) At that time, place the Pin Idler ⑦ into the Guide Home ⑧ of the Cover Reel ③, and then secure two (2) screws.
4) Mount the Holder LED ② to the Cover Reel ③.

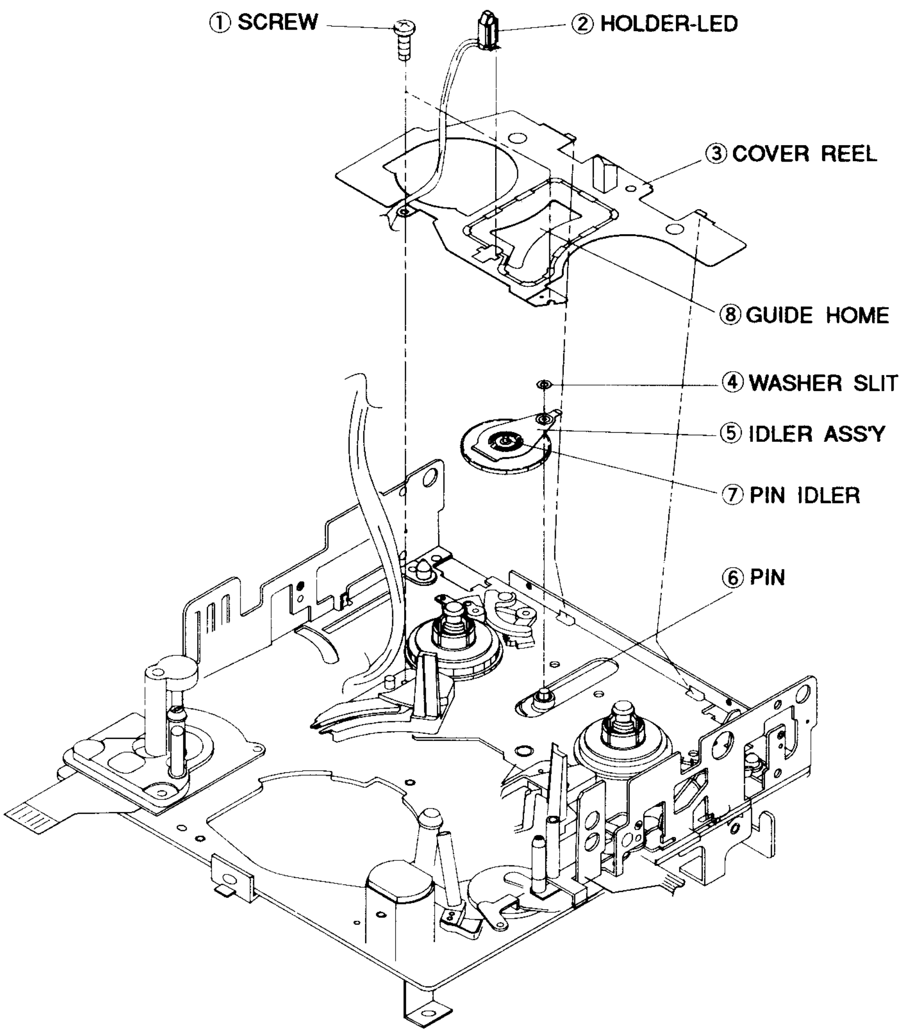

① SCREW
② HOLDER-LED
③ COVER REEL
⑧ GUIDE HOME
④ WASHER SLIT
⑤ IDLER ASS'Y
⑦ PIN IDLER
⑥ PIN

Fig. 7

2-4-4. Sub Deck Ass'y Removal from the Main Deck Ass'y

1. Removal

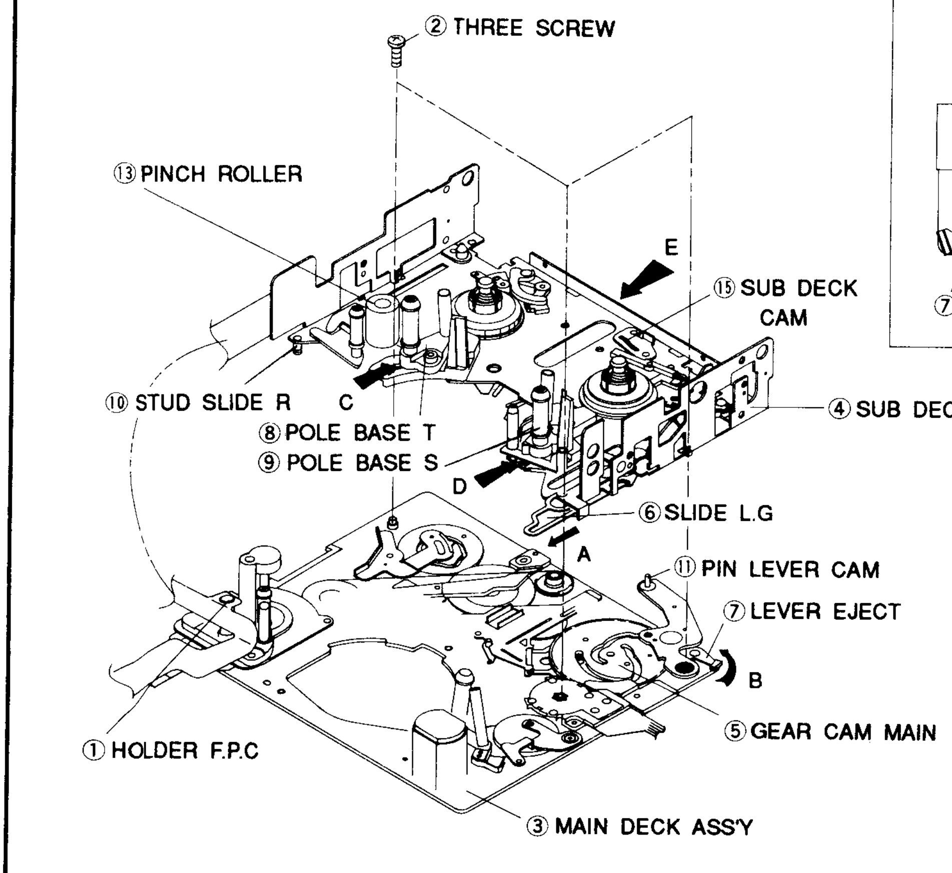
> Note :
> 1) When disassembling, take care not to damage the other parts.
> 2) Always remove the Sub Deck Ass'y when Deck Ass'y is eject mode.

1) Take out the Holder F.P.C ① from the Main Deck Ass'y ③.
2) Remove three (3) screws ②.
3) Remove the Sub Deck Ass'y ④ from the Main Deck Ass'y ③.

2. Installation

1) Align main base hole with Gear-cam main holes as shown in the Fig. A. (Refer to install point)
2) Push the Pole Base T ⑧ and the Pole Base S ⑨ in the direction of arrows "C", "D".
3) Take out the Slider L.G ⑥ toward "A", and then push the Lever Eject ⑦ toward "B".
4) Put in the Stud Slide R ⑩ to the slider area of Main Base as described in Fig. B.
   Insert the pin Lever Cam ⑪ into the Sub Deck Cam ⑮.
5) Fit the Slider L.G ⑥ to the Bush screw of the Main Deck and then confirm whether the Plate Slide ⑭, and the Arm Loading are fixed correctly as shown in the Fig C.
6) Install the Sub Deck with three (3) screws ②.
7) Install the Holder F.P.C ① to the Main Deck Ass'y ③.

> Note : After assembling the Sub-Deck Ass'y, make sure that the Sub-Deck Ass'y is performed correctly by power supply giving 3V to loading Motor with changing voltage direction.


② THREE SCREW
⑬ PINCH ROLLER
E
⑮ SUB DECK CAM
④ SUB DECK ASS'Y
⑩ STUD SLIDE R
C
⑧ POLE BASE T
⑨ POLE BASE S
D
⑥ SLIDE L.G
A
⑪ PIN LEVER CAM
⑦ LEVER EJECT
B
⑤ GEAR CAM MAIN
① HOLDER F.P.C
③ MAIN DECK ASS'Y

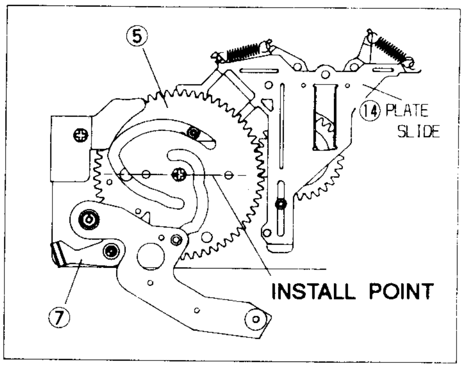

⑤
⑭ PLATE SLIDE
INSTALL POINT
⑦

Fig. A

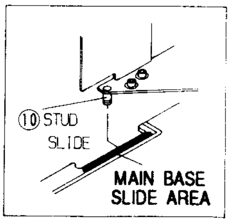

⑩ STUD SLIDE
MAIN BASE SLIDE AREA

Fig. B

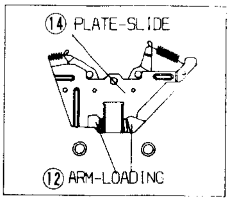

⑭ PLATE-SLIDE
⑫ ARM-LOADING

Fig. C

Fig. 8

2-5. SUB DECK ASS'Y

2-5-1. Arm Pole Base S, Arm Pole Base T

1. Removal

1) Take out the Pole Base S ① from Rail S ③ in the direction of arrow "B", and remove the Arm Loading S ⑤ from Sub Deck as described in Fig. A.
2) Take out the Pole Base T ② from Rail T ④ in the direction of arrow "A", and remove the Arm Loaing T ⑥ from Sub Deck as described in Fig. A.

2. Installation

1) Insert the Arm Loading S to the Sub Deck, and turn in the direction of arrow "C", and then put in the two pin of the Pole Base S ① to the Rail S ③ in the opposite direction of arrow "B".
2) Insert the Arm Loading T to the Sub Deck (Refer to Fig. A and turn in the direction of arrow "D", and the put in the two pin of the Pole Base T ② to the Rail T ④ in the opposite direction of arrow "A".

Note : When assembling, be careful not to stain the Roller and slant Pole of the Pole Base from the oil, grease, etc.

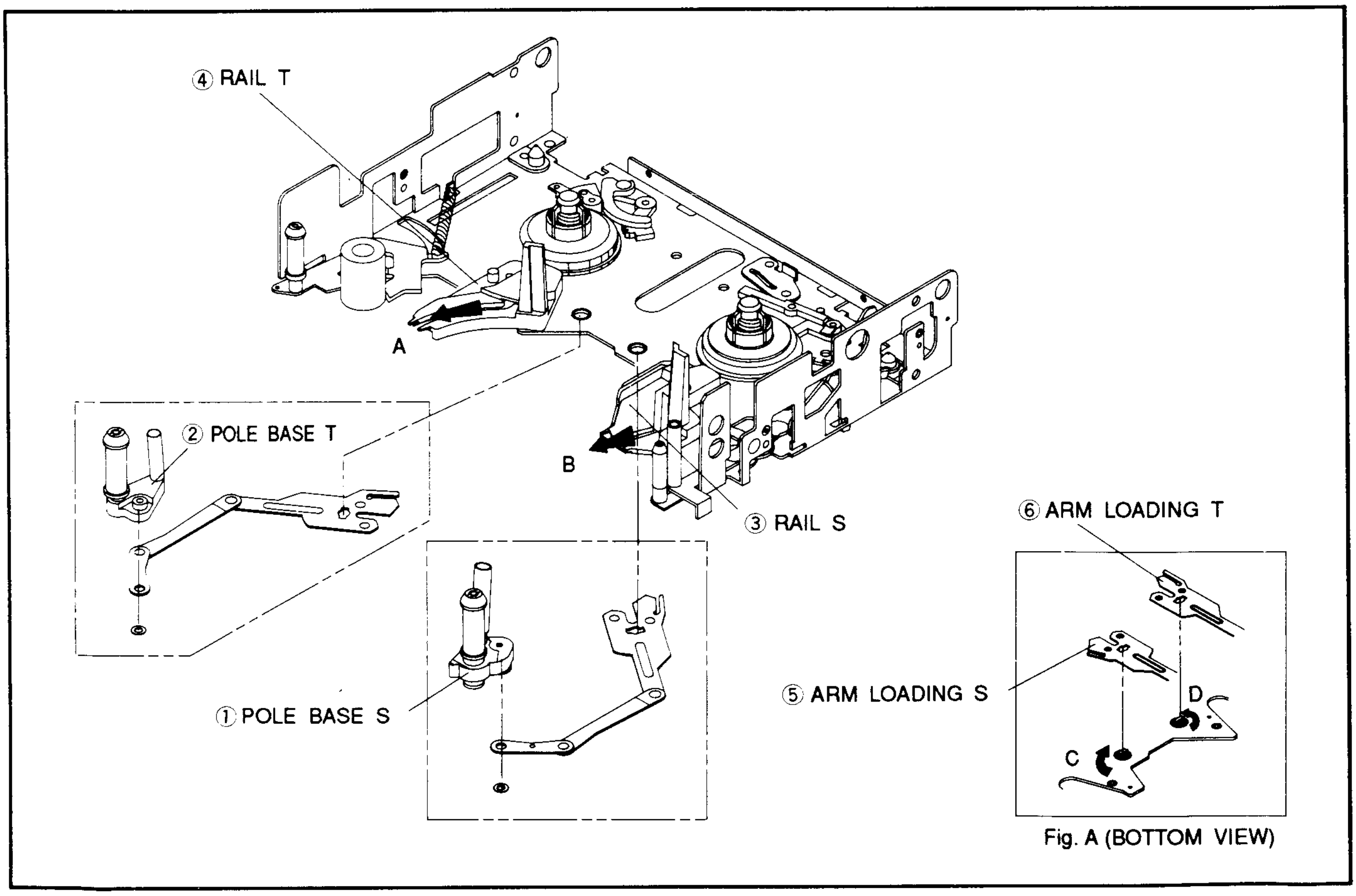


Fig. A (BOTTOM VIEW)

Fig. 9

2-5-2. Pinch Roller Ass'y & Arm Review Ass'y

1. Removal

1) Remove the Washer Slit ①, and then remove the Arm Review Ass'y ② and Spring Review Arm ③.
2) Take out the Spring Lever Pinch ⑤ from Claw ④, then remove the Arm Pinch Roller Ass'y ⑥.

2. Installation

1) Put in the Arm Pinch Roller Ass'y ⑥ on the bush, and hang the Spring Lever Pinch ⑤ on the Claw ④.
2) Install it with the Washer Slit ①.
3) Put in the Spring Review Arm ③ to the bush, and then hook it to the Spring Hanger Area ⑧ of the Arm Review Ass'y ② and to the Main Chassis Notch ⑦.
4) Install the Arm Review Ass'y ② with the Washer Slit ①.

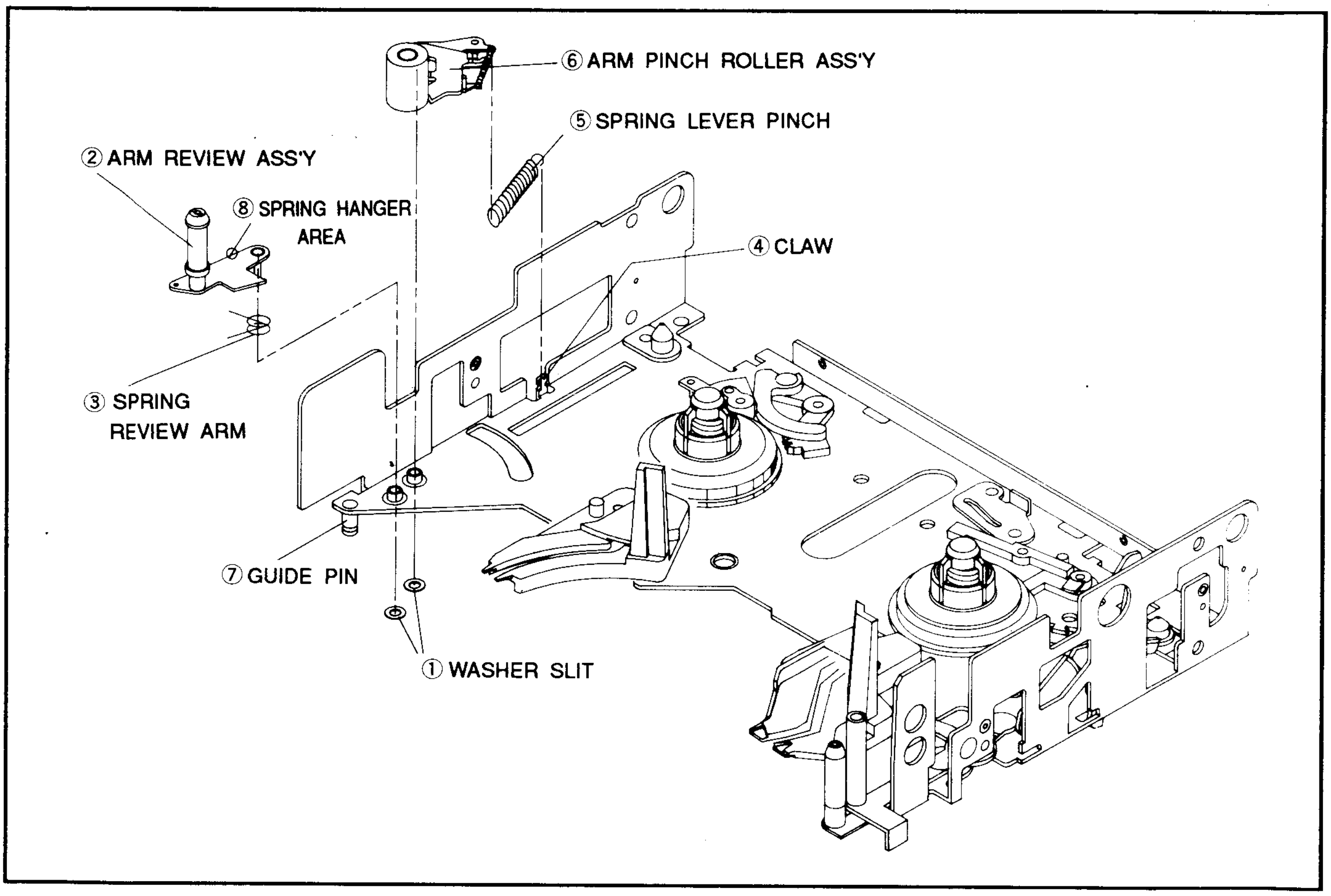

⑥ARM PINCH ROLLER ASS'Y
⑤SPRING LEVER PINCH
②ARM REVIEW ASS'Y
⑧SPRING HANGER AREA
④CLAW
③ SPRING REVIEW ARM
⑦GUIDE PIN
① WASHER SLIT

Fig. 10

2-5-3. Arm Tension Ass'y, Lever Guide Ass'y

1. Removal

1) Remove the Washer Slit ① and then remove the screw ③.
2) Remove the spring of the Arm Tension Ass'y from the Claw ⑧, and then remove the Arm Tension Ass'y ⑤ from the Bush ②.
3) Release the Hook ⑬ of the Arm Tension Ass'y from the Hole ⑫, and then remove the Ass'y Band Tension.
4) Remove the Lever Guide Ass'y ⑥, and then remove the Slide L.G ⑦ from the Sub Deck Ass'y.

Note : Be careful not to damage and stain the Arm Tension's Pole part and Lever Guide Assy's Roller part from the oil.

2. Installation

1) Mount the Slide L.G ⑦ in order to that place the Bush into the Slit ⑨ of the Slide L.G ⑦.
2) Mount the Lever Guide Ass'y ⑥ to Bush ②, at that time place the Pin Lever Guide ⑪ into the Slit ⑩.
3) Mount the Arm Tension Assy's ⑤ shaft to the Lever Guide Assy's ⑥ Bush, and then hang the spring of the Arm Tension Ass'y ⑤ on the Claw ⑧.
4) Put in the Hook of the Ass'y Band Tension ④ to the Hole ⑬, and then Mount the Ass'y Band Tension ④ so that its Dowel ⑮ align with the Slit ⑯ of the Sub Deck.
5) Install the Ass'y Band Tension ④ with the screw ③.
6) Install the Arm Tension Ass'y ⑤ with the Washer Slit ①.

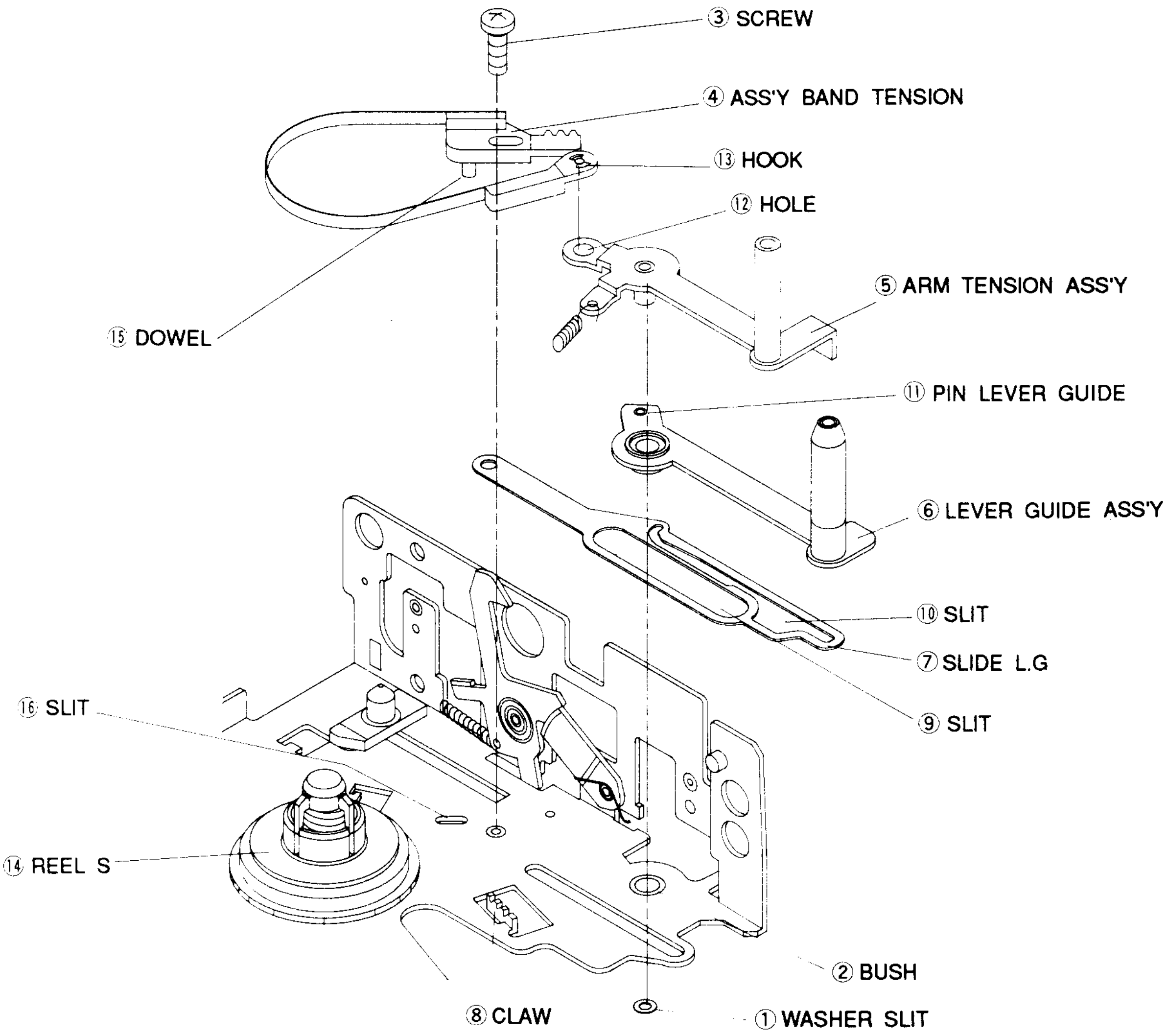

③ SCREW
④ ASS'Y BAND TENSION
⑬ HOOK
⑫ HOLE
⑤ ARM TENSION ASS'Y
⑮ DOWEL
⑪ PIN LEVER GUIDE
⑥ LEVER GUIDE ASS'Y
⑩ SLIT
⑦ SLIDE L.G
⑨ SLIT
⑯ SLIT
⑭ REEL S
② BUSH
⑧ CLAW
① WASHER SLIT

Fig. 11

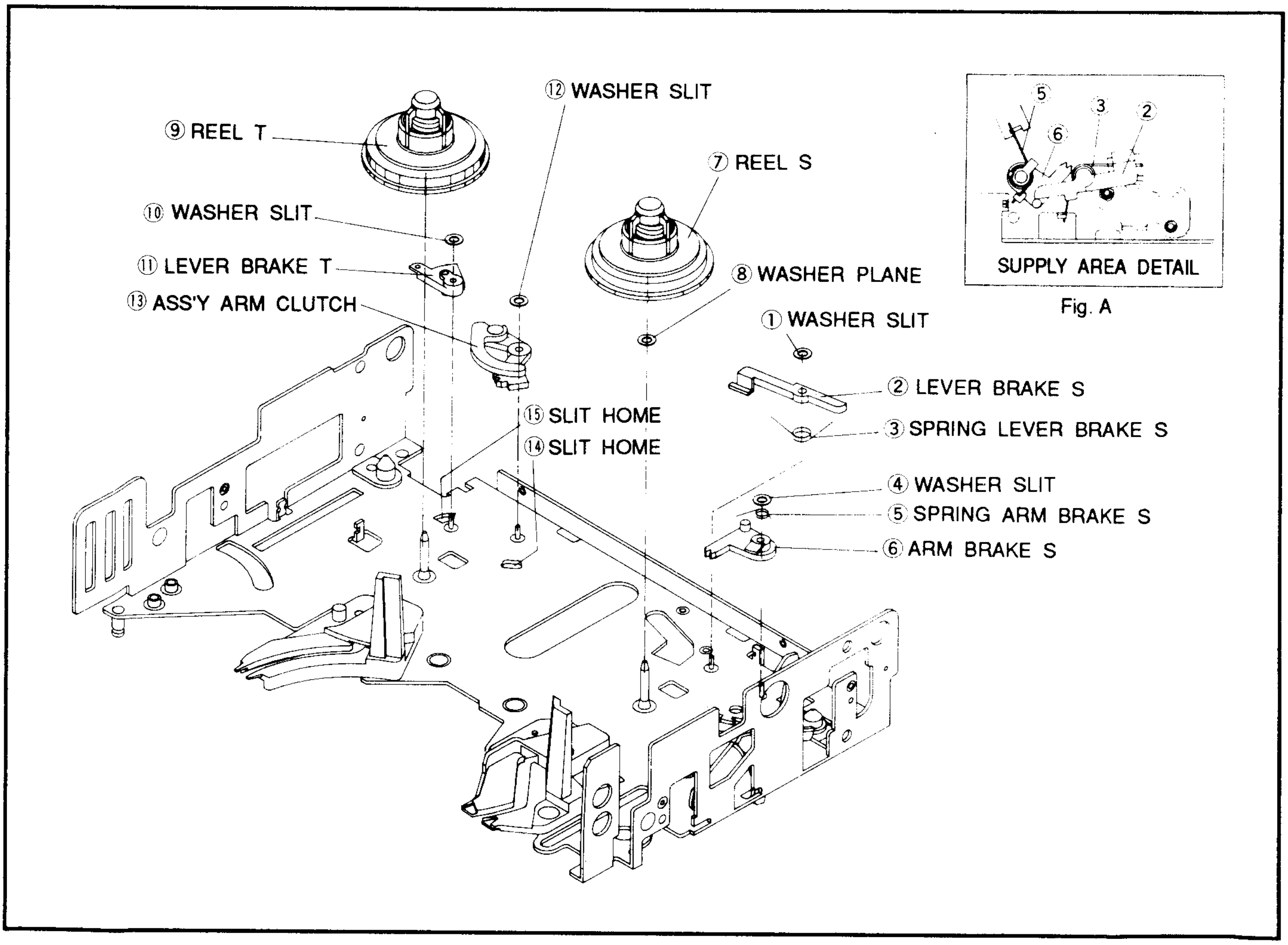
2-5-4. Reel S, T Ass'y, Arm Clutch, Lever Brake S, T

1. Disassembly

1) Remove the Ass'y Tension Band. (Refer to Fig. 11)
2) Remove the Washer Slit ①, and then remove the Lever Brake S ② and Spring Lever Brake S ③.
3) Remove the Washer Slit ④, and then remove the Arm Brake S ⑥, and Spring Arm Brake S ⑤.
4) Lift up the Reel S ⑦, and then take out the Washer Plane ⑧.
5) Remove the Washer Slit ⑩, and then remove the Lever Brake T ⑪.
6) Remove the Washer Slit ⑫, and then remove the Ass'y Arm Clutch ⑬.
7) Lift up the Reel T ⑨.

2. Installation

1) Mount the Reel T ⑨.
2) Put in the Ass'y Arm Clutch ⑬ to the slit Home ⑭ of the Sub Deck Ass'y, and then install it with the Washer Slit ⑫.
3) Put in the Lever Brake T ⑪ to the Slit Home ⑮ of the Sub Deck Ass'y, and then install it with the Washer Slit ⑩.
4) Put in the Arm Brake S ⑥, and install the Spring Arm Brake S ⑤ (Refer to Fig. A), and then install it with the washer Slit ④.
5) Put in the Lever Brake S ②, and install the Spring Lever Brake S ③ (Refer to Fig. A), and then install it with the Washer Slit ①.
6) Put in the Washer Plane ⑧ to shaft, and then mount the Reel S ⑦ to shaft.



⑫ WASHER SLIT
⑨ REEL T
⑦ REEL S
⑩ WASHER SLIT
⑪ LEVER BRAKE T
⑬ ASS'Y ARM CLUTCH
⑧ WASHER PLANE
① WASHER SLIT
② LEVER BRAKE S
⑮ SLIT HOME
⑭ SLIT HOME
③ SPRING LEVER BRAKE S
④ WASHER SLIT
⑤ SPRING ARM BRAKE S
⑥ ARM BRAKE S
5
3
2
6
SUPPLY AREA DETAIL

Fig. A

Fig. 12

2-5-5. Rail Guide S, Rail Guide T, Locker-Sub Chassis

1. Removal

1) Remove the Arm Pole Base S, Arm Pole Base T. (Refer to Fig. 9)
2) Remove the screw ①, then remove the Rail Guide T ②.
3) Remove the screw ③, then remove the Rail Guide S ④.
4) Remove the two screws ⑤, and then remove the Locker Sub Chassis ⑥.

2. Installation

1) Install in reverse order.

Note :
1) After installing the Rail Guide S ④ and the Rail Guide T ②, make sure that projection boss of bottom side and the hole are inserted correctly.
2) Be sure to use the standard screws.

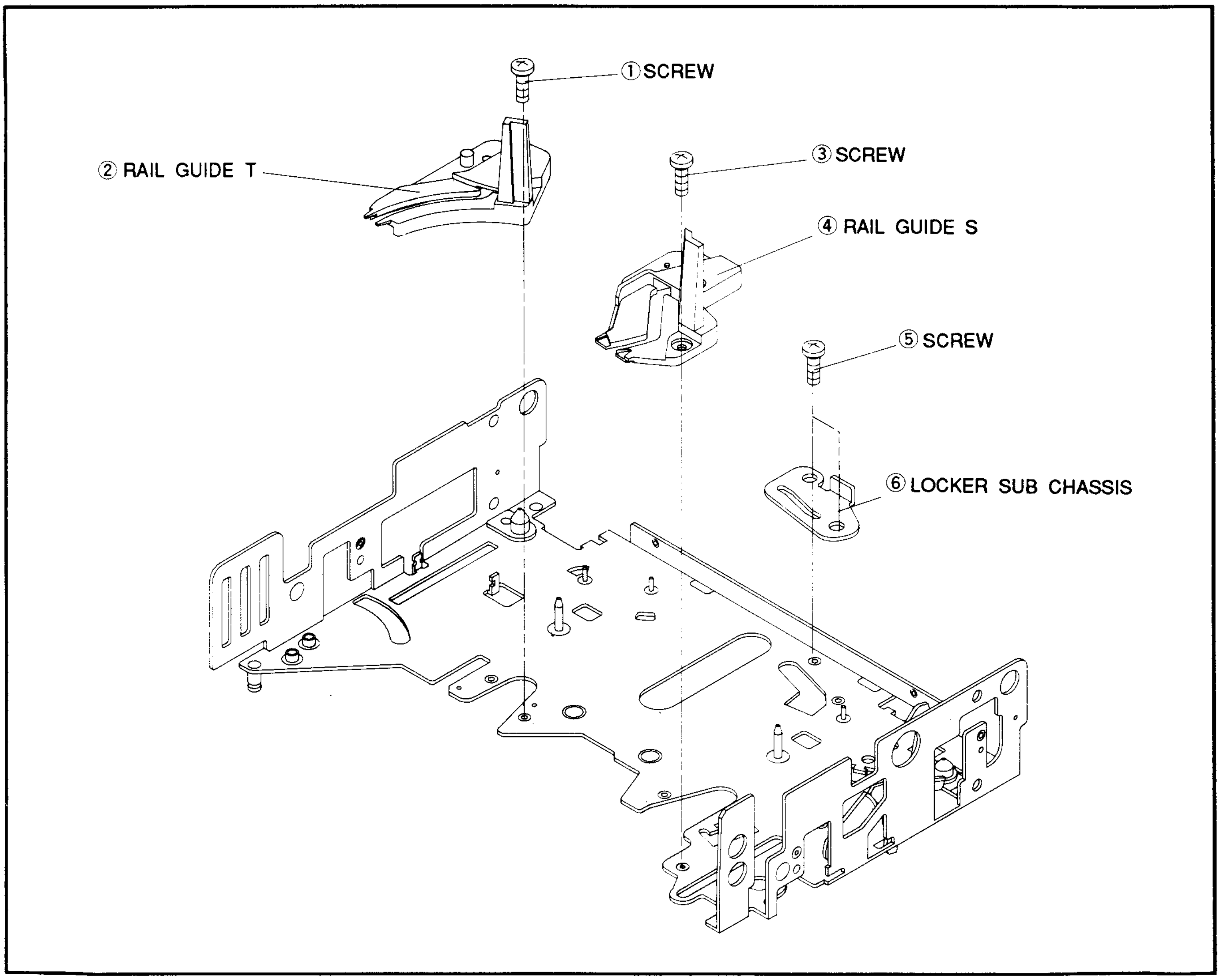

①SCREW
② RAIL GUIDE T
③SCREW
④ RAIL GUIDE S
⑤SCREW
⑥LOCKER SUB CHASSIS

Fig. 13

2-6. MAIN DECK ASS'Y

2-6-1. Loading Motor, DEW Sensor, Bracket Deck, Bracket Front Deck

1. Removal

1) Remove the screw ①, then remove the DEW Sensor Ass'y ②.
2) Remove the two (2) screws ③, then remove the Loading Motor ④.
3) Remove the three (3) screws ⑤, then remove the Bracket Front Deck ⑥.
4) Remove the three (3) screws ⑦, then remove the Bracket Front Deck ⑧.

2. Installation : Install in reverse order.

Note : When Mounting the Bracket Front Deck ⑥, and the Bracket Deck ⑧ into the Main Deck. Align the Bracket Front Deck ⑥, and the Bracket Deck ⑧ each with the two Dowels & the three Dowels of the Main Deck.

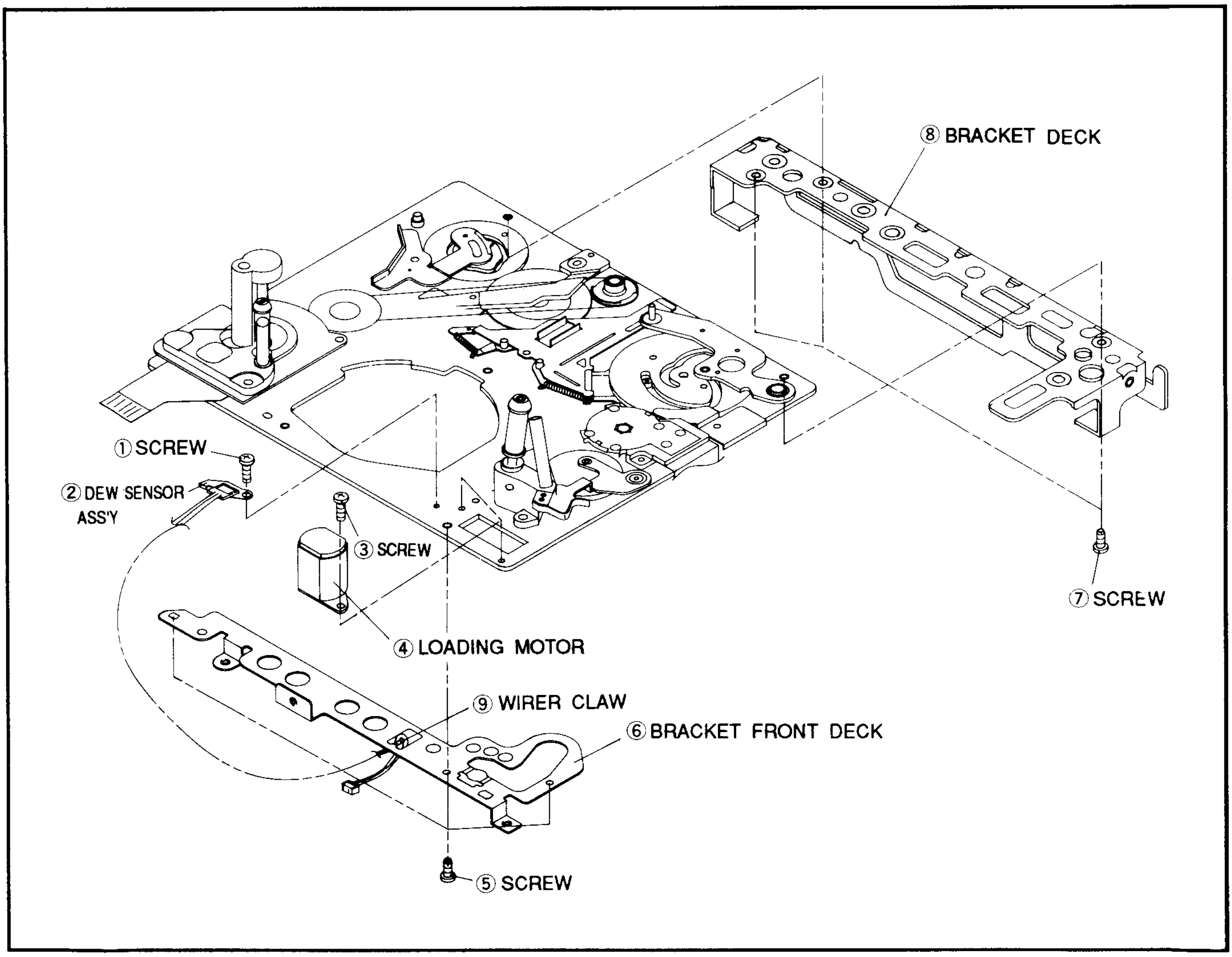

⑧ BRACKET DECK
① SCREW
② DEW SENSOR ASS'Y
③ SCREW
④ LOADING MOTOR
⑦ SCREW
⑨ WIRER CLAW
⑥ BRACKET FRONT DECK
⑤ SCREW

Fig. 14

2-6-2. Motor Capstan, Base Capstan Ass'y

1. Removal

1) Remove the three (3) screws ①.
2) Remove the Base Capstan Ass'y ② from the two Bush ④.
3) Remove the Motor Capstan ③ from the three Bush ④.

2. Installation : Install in reverse order

Note :
1) When assembling, be careful not to cut the F.P.C Capstan of the Motor Capstan ③.
2) When assembling, make sure that the gears of Motor Capstan ③ and the gears of Gear Capstan Ass'y ⑥ are matched correctly.

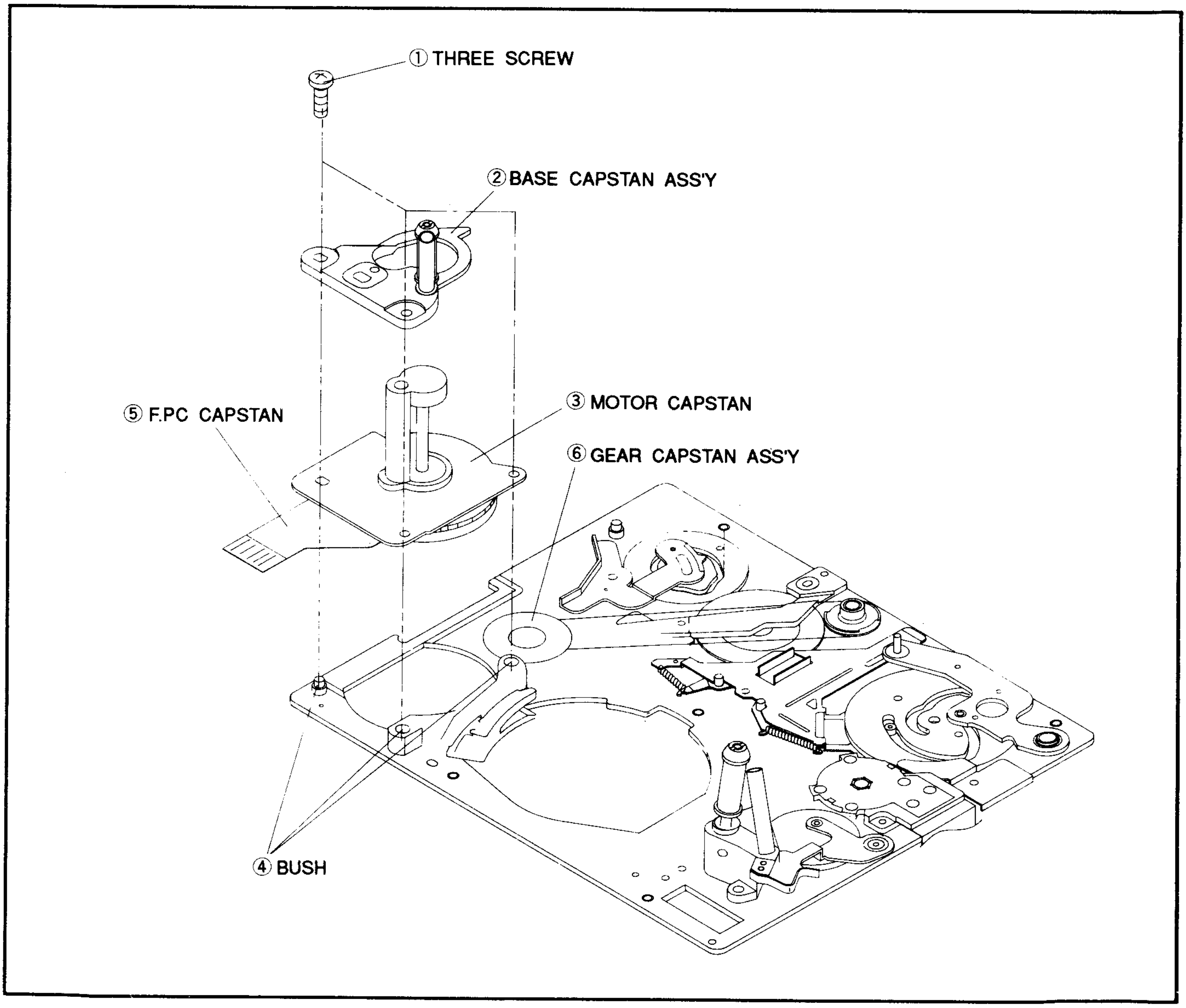

① THREE SCREW
② BASE CAPSTAN ASS'Y
⑤ F.PC CAPSTAN
③ MOTOR CAPSTAN
⑥ GEAR CAPSTAN ASS'Y
④ BUSH

Fig. 15

2-6-3. Rail Middle R/L, Gear Capstan Ass'y, Gear Pully Ass'y, Cover Time Belt

1. Removal

1) Remove the Rail Middle R ①, then remove the screw ②, and then remove the Rail Middel L from the Main Deck.
2) Remove the Gear Pully Ass'y ④ from the axle to attached with the Belt Timing.
3) Remove the Washer Slit ⑥, then the Gear Capstan Ass'y from the axle.
4) Remove the two (2) screws, then remove the Cover Timing Belt.

2. Installation

1) Mount the cover timing Belt on the Main Deck, then secure it with the two (2) screws.
2) Fit the Gear Capstan Ass'y ⑦ to the axle, and then install the Washer Slit ⑥.
3) Hang up the Belt Timing ⑤ between the low Gears of the Gear Capstan Ass'y ⑦ and the low Gears of the Gear Pully Ass'y ④, and then fit the Gear Pully Ass'y ④ into the axle with the Belt Timing ⑤ attached. (See Fig. A)
4) Mount the Rail Middle L ③ on the Main Deck, then secure it with the one (1) screw ②, and then Mount the Rail Middle R ① to the Bush.

Note :
1) When installing the Cover-Time Belt ⑨, do not come off it.
2) After installing the Cover Time Belt, do not twisted it.

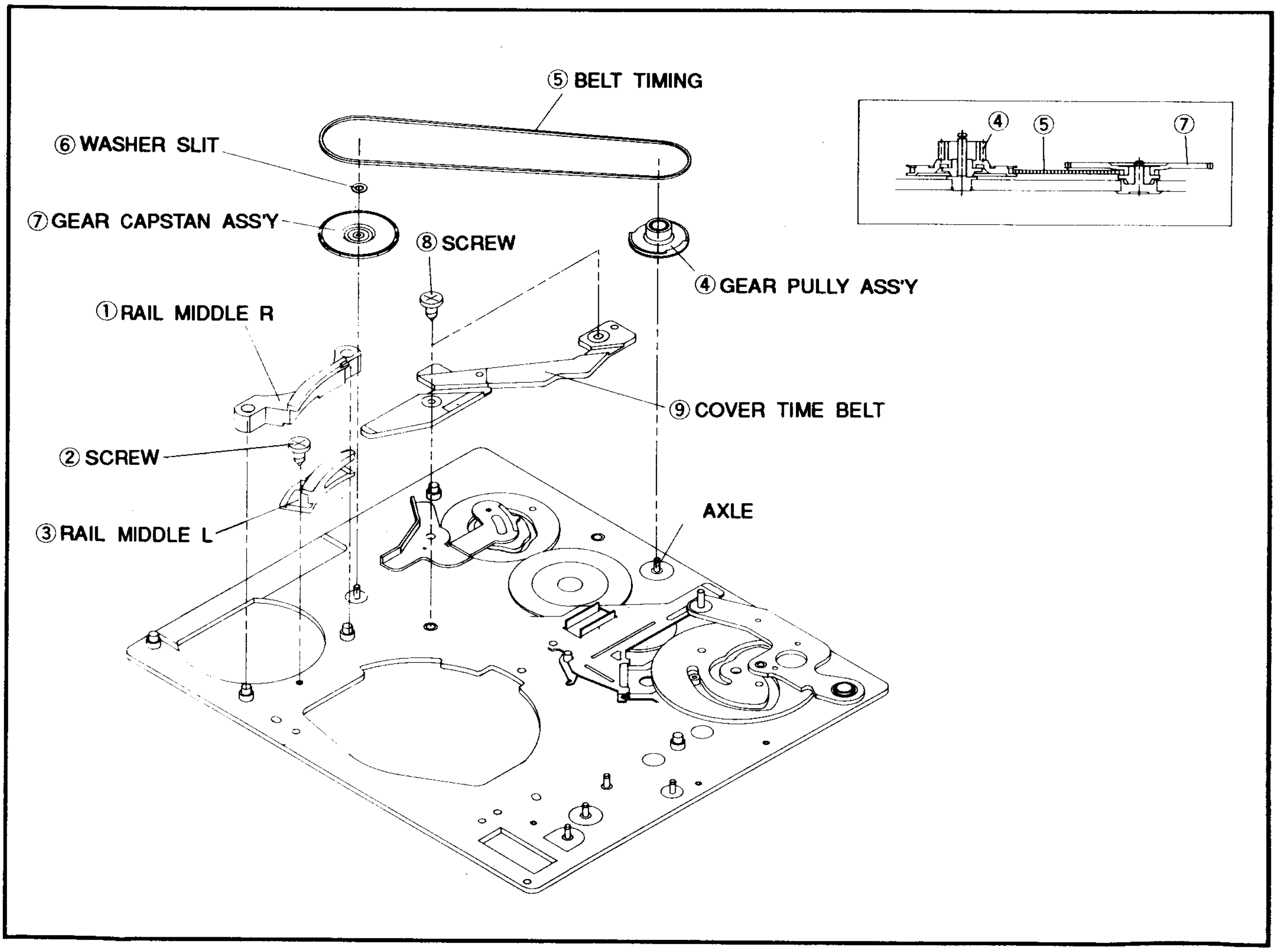

⑤ BELT TIMING
⑥ WASHER SLIT
⑦ GEAR CAPSTAN ASS'Y
⑧ SCREW
④ GEAR PULLY ASS'Y
① RAIL MIDDLE R
⑨ COVER TIME BELT
② SCREW
AXLE
③ RAIL MIDDLE L
④
⑤
⑦

Fig. 16

2-6-4. Lever Cam Pinch Ass'y, Gear Cam Pinch

1. Removal

1) Remove the two (2) screws ①, then remove the Lever Cam Pinch ② from the Main Deck.
2) Remove the Gear Cam Pinch ③ from the Main Deck.

2. Installation

1) Align the hole of Gear Cam Pinch ③ with the hole of Main Base. (Refer to Timing "A")
2) Insert the Lever Cam Pinch ② into the slit of Gear Cam Pinch ③ and secure it with two (2) screws.

Note : When Install the Gears parts, refer to Fig. 20.

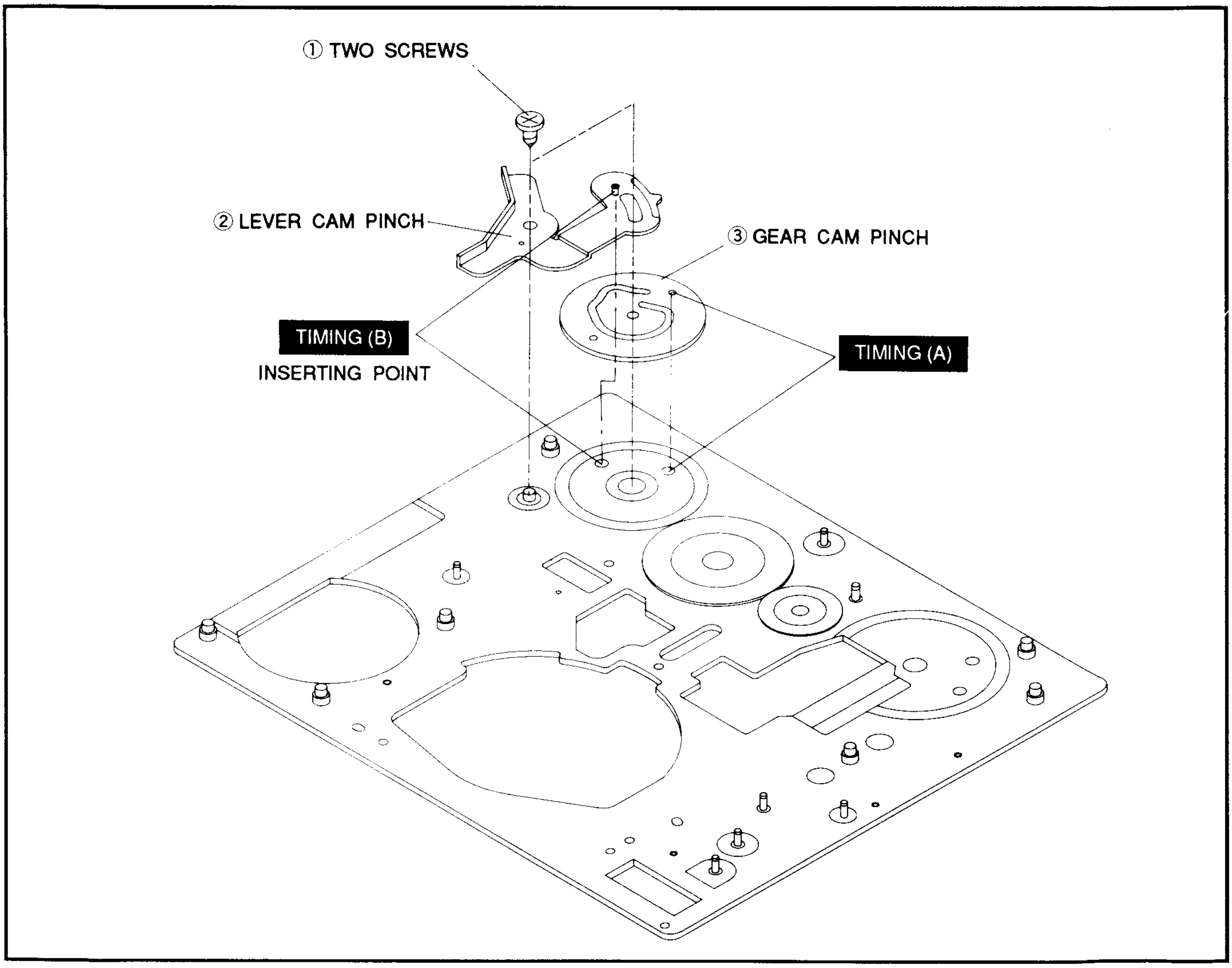

① TWO SCREWS
② LEVER CAM PINCH
③ GEAR CAM PINCH
TIMING (B)
INSERTING POINT
TIMING (A)

Fig. 17

2-6-5. Lever Cam, Lever Eject, Gear Cam Main, Plate Slider Ass'y

1. Removal

1) Remove the Lever Cam Ass'y ① and Roller Cam Main ②.
2) Remove the Lever Eject ③.
3) Remove one (1) screw ④, then remove the Gear Cam Main ⑤.
4) Remove the Washer Slit ⑥, then remove Plate Slide Ass'y ⑧ and the Roller Cam Main ⑦.

> Note : When removing the Gear Cam Main ⑤, and Lever Cam Main ① from the Main Deck, take care not to loss of the Roller Cam Main ②, ⑦.
> (Refer to Fig. A, Fig. B)

2. Installation

1) Insert the Roller Cam Main ⑦ to the Plate Slider Ass'y ⑧ as described in Fig. A, then Mount it to the Main Deck, and then secure it with the Washer Slit ⑥.
2) Pull the Plate Slider Ass'y ⑧ in the direction of arrow A.
3) Install the Gear Cam Main ⑤ so that the hole of Gear Cam Main ⑤ and the hole of Main Base are aligned as shown in the "Timing (D)". (Refer to Timing (C))
4) Insert the Lever Cam Ass'y ① into the groove of the Gear Cam Main ⑤ as shown in the Timing (E).

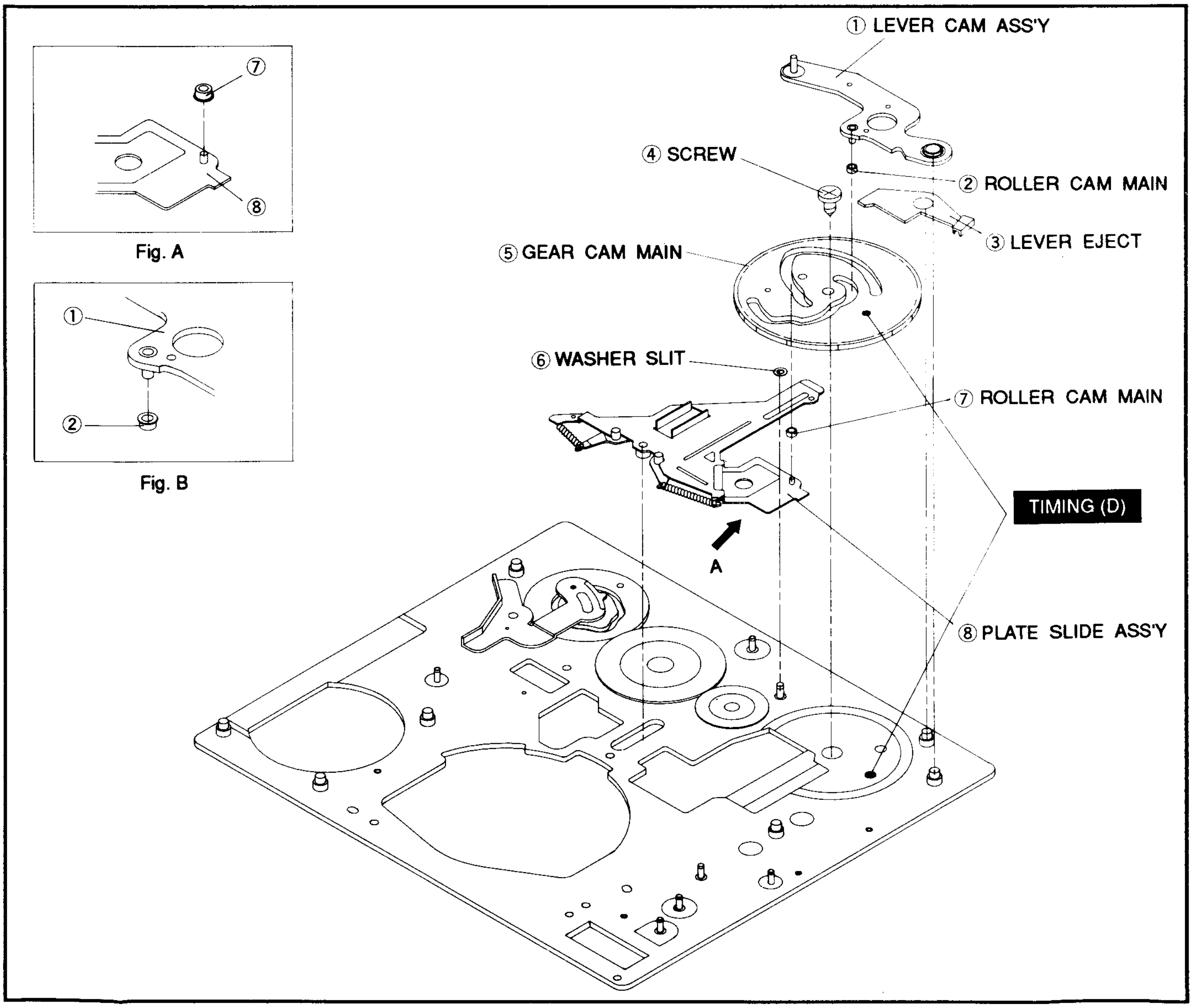

⑦
⑧
①
②
① LEVER CAM ASS'Y
④ SCREW
② ROLLER CAM MAIN
③ LEVER EJECT
⑤ GEAR CAM MAIN
⑥ WASHER SLIT
⑦ ROLLER CAM MAIN
TIMING (D)
A
⑧ PLATE SLIDE ASS'Y

Fig. A

Fig. B

Fig. 18

2-6-6. Pole Base Sub Ass'y, Switch Mode Ass'y, Lever Cam Tension, Gear Loading A, Gear Loading B, Gear Cam Tension

1. Removal

1) Remove one (1) screw ①, then remove the Pole Base Sub Ass'y ②.
2) Remove one (1) screw ③, then remove the Guide Mode Switch ④.
3) Remove one (1) screw ⑤, then remove the Switch Mode Ass'y ⑥.
4) Remove the Washer Slit ⑦, then remove the Lever Cam Tension ⑧.
5) Remove the Washer Slit ⑨, then remove the Gear Loading B ⑩.
6) Remove the Washer Slit ⑪, then remove the Gear Cam Tension ⑫.
7) Remove the Gear Loading A ⑬ of the axle.

2. Installation

1) Mount the Switch Mode Ass'y ⑥ as described in Timing point (F) of the Fig. 20, then secure it with one (1) screw ⑤.
2) Mount the Guide Mode Switch ④, then secure it with one (1) screw ③.
3) Fit the Gear Loading "A" into the axle, then Mount the Gear Cam Tension ⑫ as described in Timing point (G) of the Fig. 20, and then install it with the Wsaher Slit ⑪.
4) Fit the Gear Loading B ⑩ into the axle, then install it with the Washer Slit ⑨.
5) Mount the Lever Cam Tension ⑧ as described in Timing (H) of the Fig. 20, then install it with the Washer Slit ⑦.
6) Align the dowel of the Pole Base Sub Ass'y ② with the Guide Hole ⑭, then mount the Pole Base Sub Ass'y ②, and secure it with the screw ①.

Note : Confirm that the Timing point of the Switch Mode Ass'y (See Fig. 20).

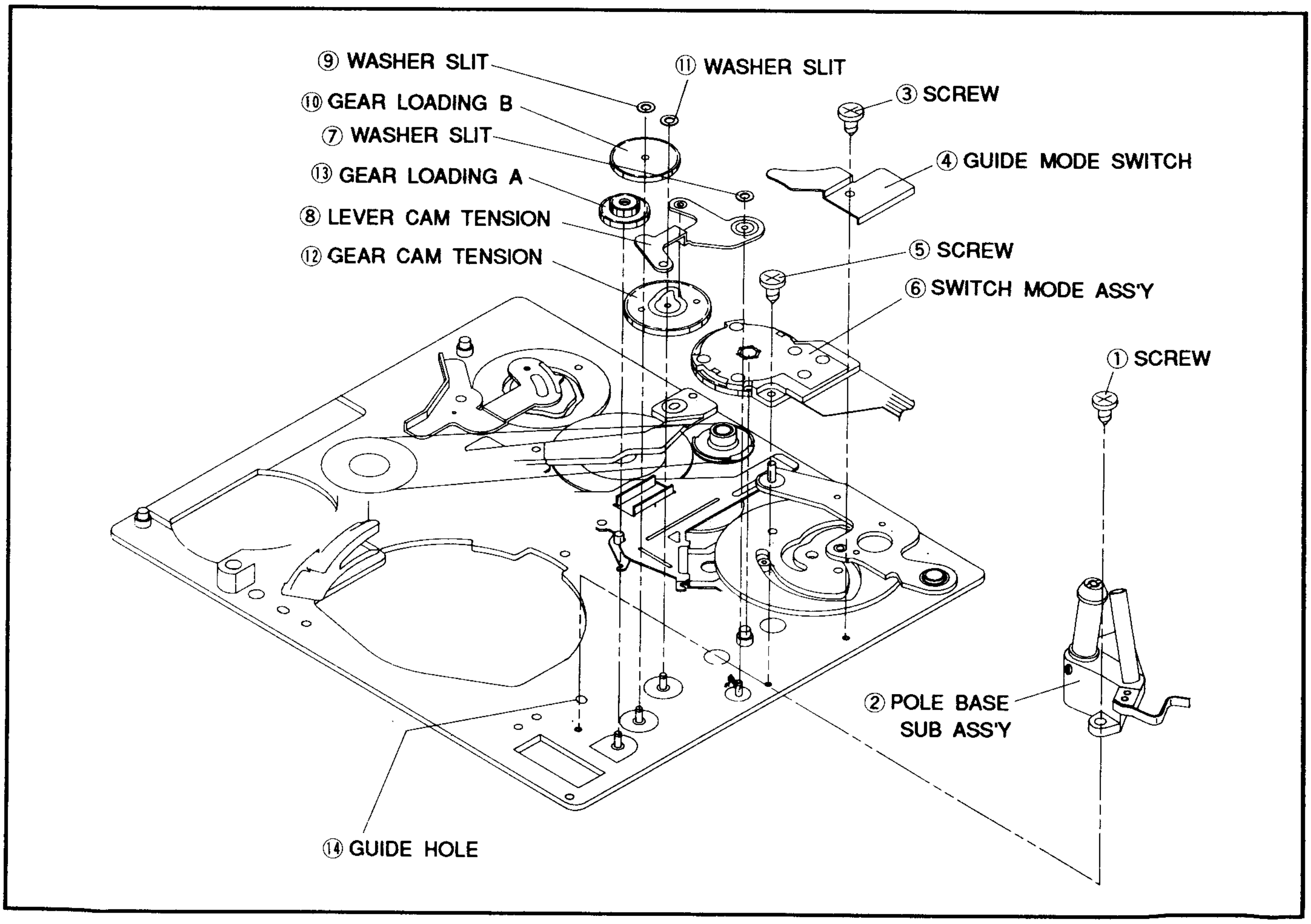

⑨ WASHER SLIT
⑩ GEAR LOADING B
⑦ WASHER SLIT
⑬ GEAR LOADING A
⑧ LEVER CAM TENSION
⑫ GEAR CAM TENSION
⑪ WASHER SLIT
③ SCREW
④ GUIDE MODE SWITCH
⑤ SCREW
⑥ SWITCH MODE ASS'Y
① SCREW
② POLE BASE SUB ASS'Y
⑭ GUIDE HOLE

Fig. 19

2-6-7. Timing Point in Main Deck

1. Timing Point Explanation

TIMING A : Align install Hole of Gear Cam Pinch ⑦ with Hole on Main Base.
TIMING B : When installing Lever Cam Pinch to Gear Cam Pinch, Timing "B" point of Cam as described in Fig. 20.
TIMING C : After assembling Plate Slider Ass'y ⑥, when installing Gear Cam Main ④, pull the plate Slider Ass'y ⑥ toward arrow and then install the Gear Cam Main ④.
TIMING D : Align Hole of Gear Cam Main ④ with Hole on Main Base.
TIMING E : When installing Lever Cam ⑤ to Gear Cam Main ④, Timing "E" point of Cam as described in Fig. 20.
TIMING F : When assembling the Gear Cam Main ④ and the Mode Switch Ass'y ③.
TIMING G : When assembling the Mode Switch Ass'y ③ and the Gear Cam Tension ①.
TIMING H : When installing Lever Cam Tension ② to Gear Cam Tension ①, Timing "H" point of Cam as described in Fig. 20.

Note : 1) Gear Train is installed A, B, C, D and E in order.
2) In case install point of Gear Trains mismatched, malfunction and part demage may be happened.
Special precaution is required to prevent it

2. Install Point Adjustment to assemble Sub-Deck

After finishing assembly of Gear Train, rotate Gear Cam Pinch ⑦ to align 3 holes of install point, as desciebed in Fig. A, in order to assemble Sub Deck.

Note : If loading Motor is existed, Gear Train will not be working. But Loading Motor can be moved by Power Suppoy giving 3V to Loading Motor with changing voltage direction.

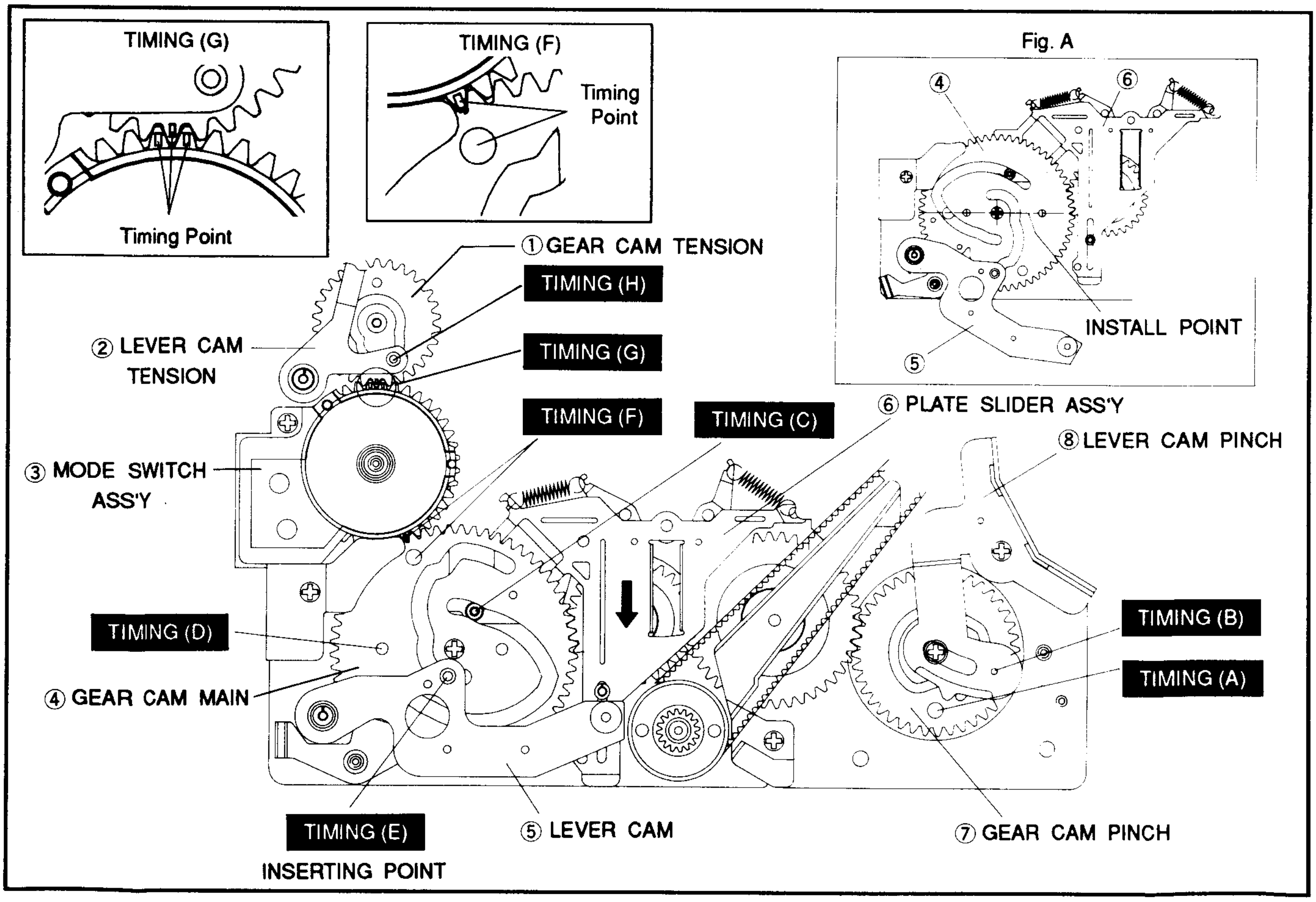

TIMING (G)
Timing Point
TIMING (F)
Timing Point
Fig. A
④
⑥
INSTALL POINT
⑤
① GEAR CAM TENSION
TIMING (H)
② LEVER CAM TENSION
TIMING (G)
TIMING (F)
TIMING (C)
⑥ PLATE SLIDER ASS'Y
⑧ LEVER CAM PINCH
③ MODE SWITCH ASS'Y
TIMING (D)
TIMING (B)
TIMING (A)
④ GEAR CAM MAIN
TIMING (E)
INSERTING POINT
⑤ LEVER CAM
⑦ GEAR CAM PINCH

Fig. 20

3. MECHANICAL ADJUSTMENT

3-1. PLAYBACK TENSION ADJUSTMENT (See Fig. 1)

1. Remove Cover Housing, Case Front, Case Right, Camera Block. (See section 2-1-1, 2-1-2, 2-1-3, and 2-1-8 on the page 2-1, 2-2, 2-4)
2. Supply DC 7.5V to Battery Terminal.

1. Set the Torque Cassette.
2. Set the Play mode, and confirm that Reel Disk S torque value is within 4.5 ± 1 g/cm.
3. If the torque value does not meet the specification, adjust the Tension Spring ①.

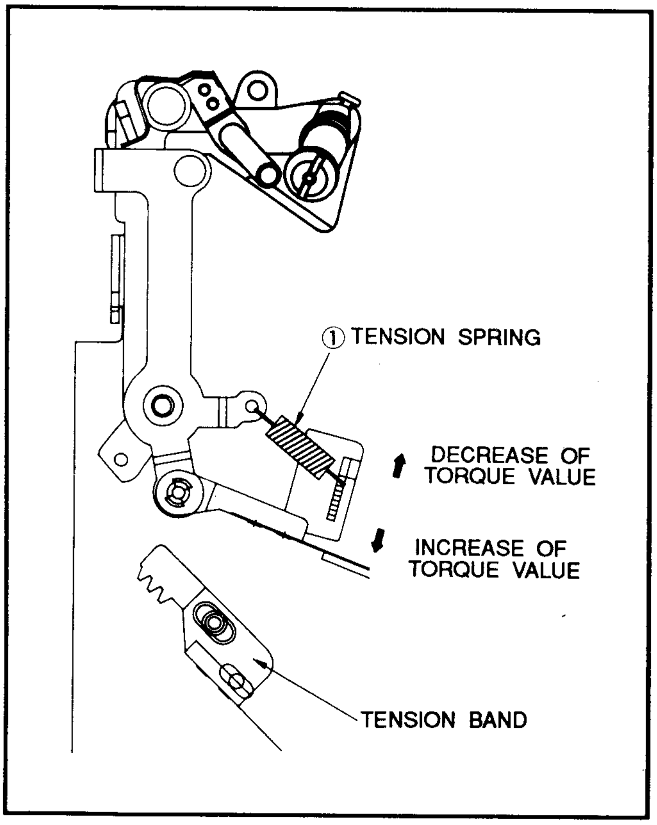

① TENSION SPRING
DECREASE OF TORQUE VALUE
INCREASE OF TORQUE VALUE
TENSION BAND

Fig. 1

3-2. REEL TORQUE CHECK

1. Set the Torque Cassette.
2. Set the Play mode, and confirm that Reel Disk T torque value 10.5 ± 3.5 g/cm.
3. Set the RPS mode and confirm that Reel Disk S torque value is within 35 ± 5 g/cm.
4. If the torque value does not meet the specifications, replace the corresponding Reel Disk.

3-3. TAPE PATH ADJUSTMENT

3-3-1. Layout of Tape Transport Adjustment

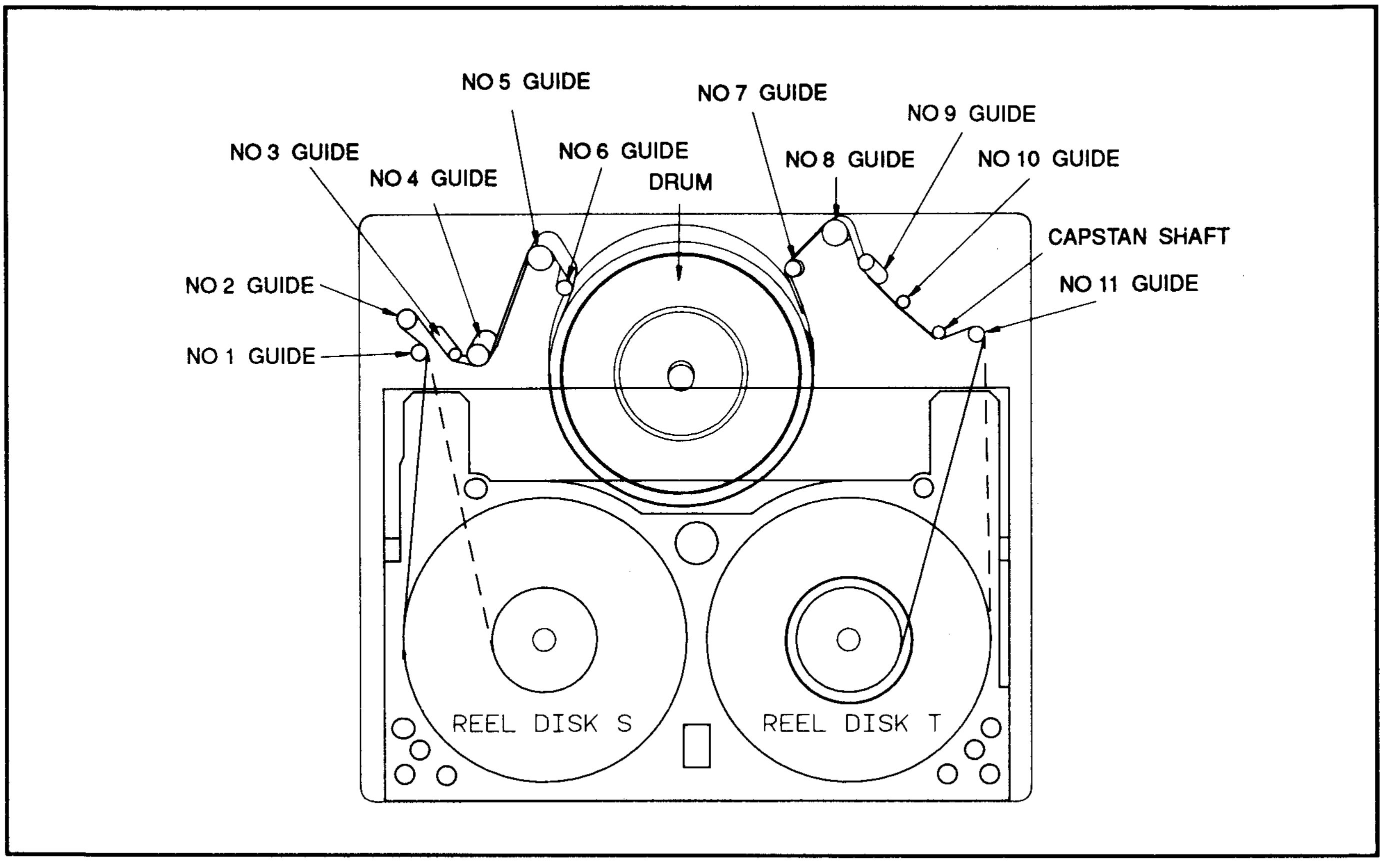
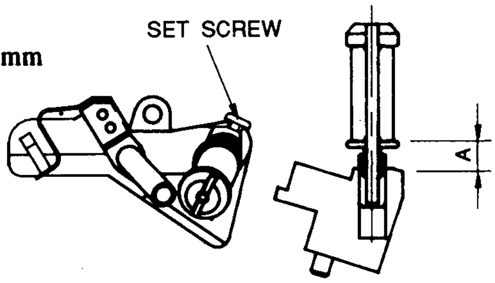
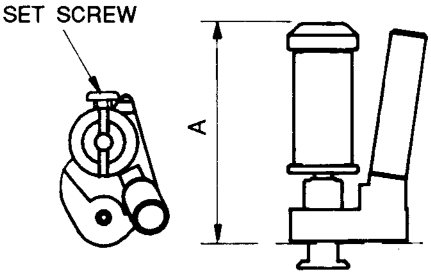
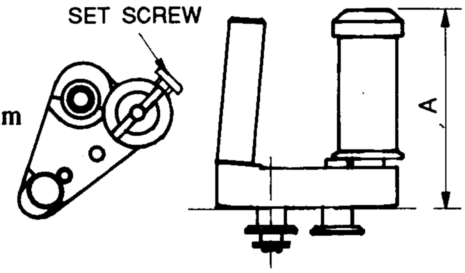
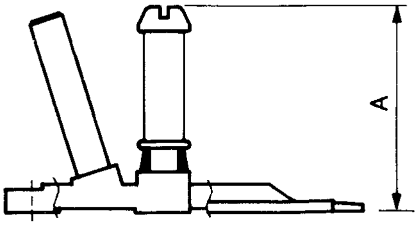
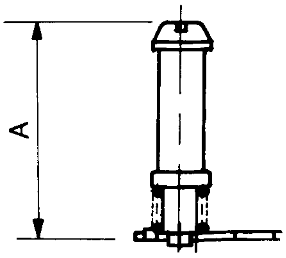

NO 5 GUIDE
NO 7 GUIDE
NO 9 GUIDE
NO 3 GUIDE
NO 4 GUIDE
NO 6 GUIDE
DRUM
NO 8 GUIDE
NO 10 GUIDE
CAPSTAN SHAFT
NO 2 GUIDE
NO 11 GUIDE
NO 1 GUIDE
REEL DISK S
REEL DISK T

Fig. 2 Layout of Tape Transport Adjustment

Guide NO.	Component Name	Rotating direction of Adjustment	Specification	Adjustment Purpose
NO. 1	Tension Pole	—	—	—
NO. 2	Roller Lever/G	—	—	—
NO. 3	Slant Pole SUB	—	—	—
NO. 4	Guide Roller SUB	Counterclockwise	2.3 ± 0.5mm	Tape Height
NO. 5	Guide Roller "S"	Counterclockwise	15.4 ± 0.05mm	Envelope
NO. 6	Pole Slant "S"	—	—	—
NO. 7	Pole Slant "T"	—	—	—
NO. 8	Guide Roller "T"	Counterclockwise	13.30 ± 0.05mm	Envelope
NO. 9	Pole Slant CAP	—	—	—
NO. 10	Shaft Pole Guide	Counterclockwise	15.20 ± 0.05mm	Tape Guide
NO. 11	Post Review Arm	Counterclockwise	14.9 ± 0.05mm	Tape Wrinkle

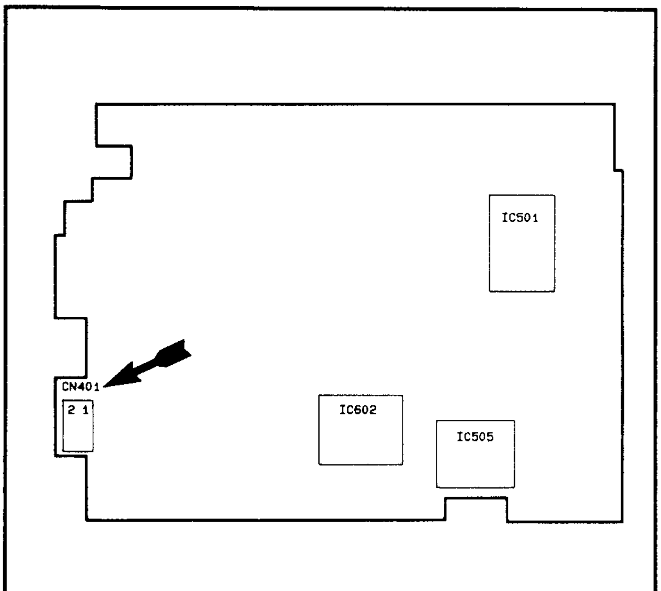
3-3-2. Presetting Height of Tape Path Components

Guide NO.	Component Name	Presetting Height
NO. 4 Guide	Guide Roller SUB or Impedance-Roller	A = 2.3 ± 0.05mm 
NO. 5 Guide	Guide Roller "S"	A = 15.4 ± 0.05mm 
NO. 8 Guide	Guide Roller "T"	A = 13.30 ± 0.05mm 
NO. 10 Guide	Shaft Pole Guide/T	A = 15.2 ± 0.05mm 
NO. 11 Guide	Post Review Arm	A = 14.9 ± 0.05mm 

3-3-3. Preparation for Adjustment

1. Clean tape path surfaces. (Guide Roller, Tape Guides, Drum) (See Fig. 2)
2. Connection of oscilloscope and output of waveform.

Test Point : Pin 1 of CN401 (PB RF)
Pin 2 of CN401 (H'D SW - Trigger)
Test Tape : SE4-2L



(VTR Main PCB - Top Side)

3-3-4. Tracking Adjustment

1. Playback the alignment tape for tracking adjustment.
2. Confirm that both the entrance and exit side RF waveforms of oscilloscope are flat. (See Fig. 3)
   If they are not, adjust as follows. (Tracking fine adjustment)

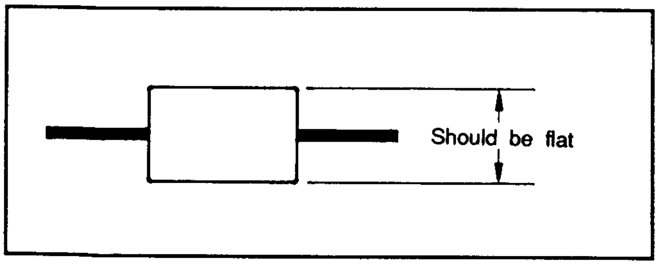


Fig. 3

3-3-5. Tracking fine Adjustment (See Fig. 4)

1. Playback the alignment tape for tracking adjustment.

【Adjustment of Drum entrance side】
1) Confirm whether the waveform is flat or not.
2) If it shows like A : Adjust No. 5 Guide (Guide Roller S) toward clockwise to get the flat envelope waveform.
3) If it shows like B : Adjust No. 5 Guide toward counterclockwise to get the flat envelope waveform.

【Adjustment of Drum exit side】
1) Confirm whether the waveform is flat or not.
2) If it shows like C : Adjust No. 8 Guide (Guide Roller T) toward colckwise to get the flat envelope waveform.
3) If it shows like D : Adjust No. 8 Guide toward counterclockwise to get the flat envelope waveform.

2. Reconfirm the envelope waveform.

1) After following step 1 reconfirm that envelope waveform has not changed.
2) If it's changed, please repeat step 1.

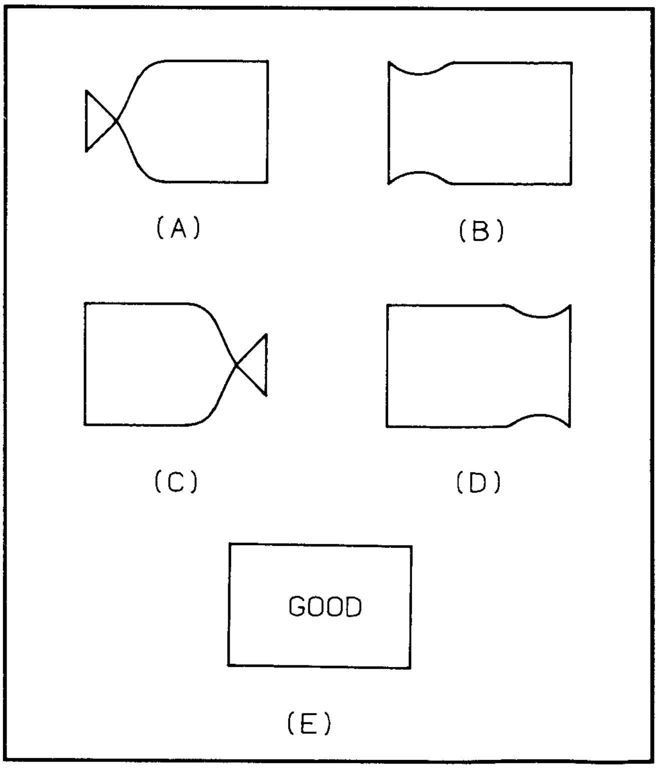


Fig. 4

3-3-6. Tape Guide Adjustment

1. No. 4 Guide Adjustment (See Fig. 5 and 6)

1) Playback the alignment tape.
2) Check that the tape is not bent at the Lower Flange.
3) Guide the tape to the Lower Flange.
4) CUE/RPS the tape, then Play it Back and confirm that the RF waveform rises flat within 2.5 seconds. (See Fig. 5)
5) If the waveform is not normal, repeat step 3) and 4) until a normal waveform is obtained.

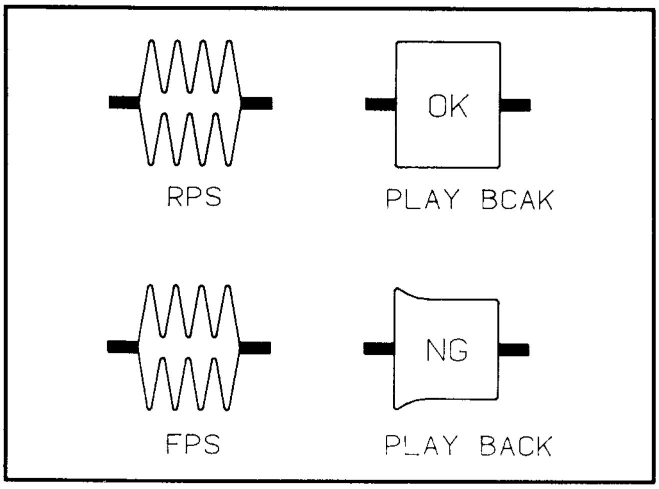


Fig. 5

2. No. 10 Guide Adjustment (See Fig. 6)

1) Playback the alignment tape and guide the tape to the Lower Flange.
2) CUE/RPS the tape, then Play it Back and confirm that the tape is not bent at the Flange, on the other hand check that RF waveform rises flat within 2.5 seconds in the PLAYBACK mode.
3) If the waveform is not normal, repeat steps 1) and 2) until a normal waveform is obtained.
4) If the tape is bent in the RPS mode, Adjust No. 11 Guide until the tape is straightened.

3. No. 11 Guide Adjustment (See Fig. 6)

1) Playback the alignment tape.
2) Check that the tape is not bent between No. 10 Guide and Capstan.
3) Set the Play mode again and confirm that the tape is not bent. If the tape is bent, repeat steps 1) and 2).

4. CUE and RPS Waveform Check (See Fig. 7)

1) Playback the alignment tape for tracking adjustment and set the RPS mode. Confirm that waveform peaks maintain a constant pitch for 5 seconds or more. In case pitch is not constant, perform section 3-3-5 tracking fine adjustment and section 3-3-6 tape guide adjustment. (No. 11 Guide)
2) Set the CUE mode and confirm that waveform peaks maintain a constant pitch for 5 seconds or more, otherwise, perform section 3-3-5 and section 3-3-6. (No. 4 Guide)

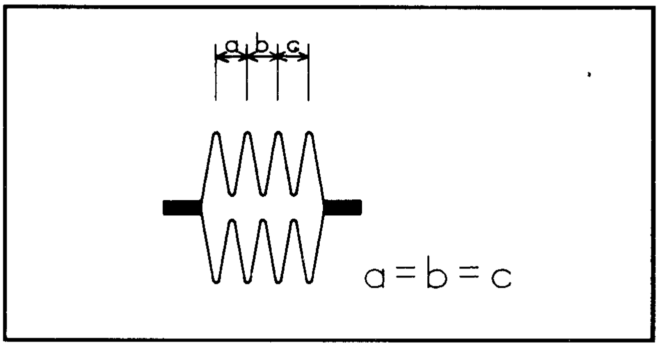


Fig. 7

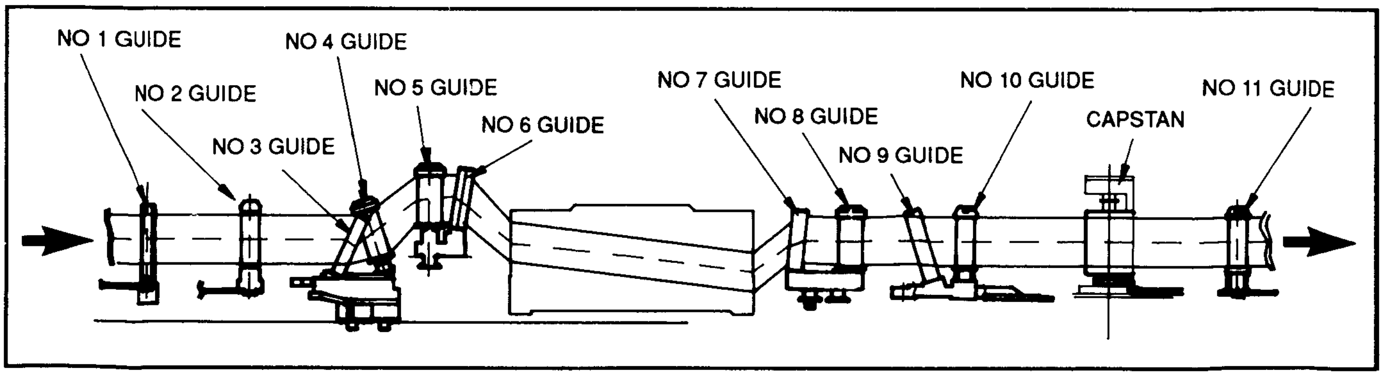


Fig. 6 Tape Travel Diagram

3-4. CHECK AFTER ADJUSTMENT

3-4-1. Tape Path Check (See Fig. 6)

1. Playback a tape and confirm that no tape rising and curling occur at the Lower Flange of No. 4 Guide, the Upper Flange of No. 8 Guide, the Lower Flange of No. 10 Guide and the No. 11 Guide Upper and Lower Flanges.
2. In the FPS, RPS, FF, REW mode, check step 1) again.
3. If no tape rising and curling occur, repeat section 3-3-5 and 3-3-6 once more.

3-4-2. Envelope Stability Check

1. Playback the alignment tape.
2. Eject the tape, then load it again.
3. Confirm the envelope waveform.

*** STOP → PLAY ;**
Set the Play Back mode and confirm that RF waveform rises flat within 2.5 seconds, also confirm that the tape is not bent around the Pinch Roller.

*** FPS/RPS → PB, FF/REW → PB ;**
CUE/RPS and FF/REW the tape, then Play it Back and confirm that the RF waveform rises flat within 2.5 seconds also confirm that the tape is not bent around the Pinch Roller.

3-4-3. Tracking Check

1. Playback the alignment tape.
2. Then confirm that the minimum amplitude value (Emin) is 65% of the maximum value (Emax) or larger. (See Fig. 8 (A))
3. Confirm that no large fluctuations occurs on the waveform. (See Fig. 8 (B))

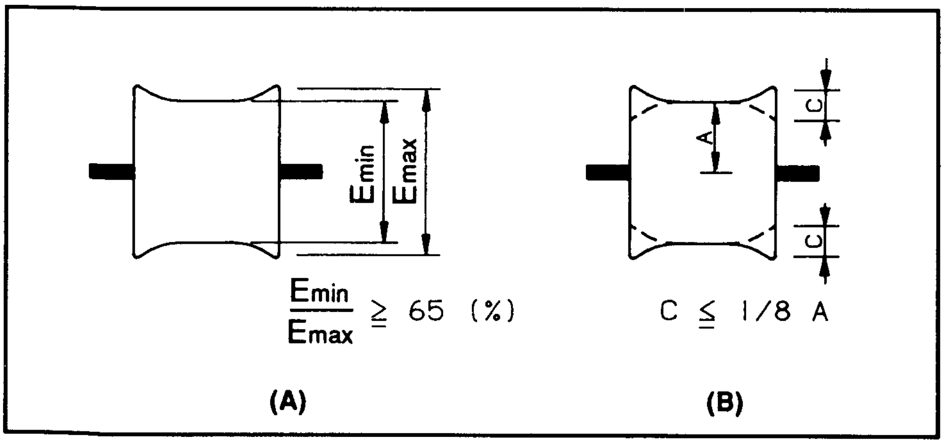


Fig. 8

3-4-4. Self-Recording Envelope-Waveform Check

1. After self-recording in the SP mode Play Back the tape and confirm that the RF waveform meets the specification. (See Fig. 9)
   Also, check that the level of the amplitude value meets specification. (See Electronical specification)
2. In the LP mode, only play back the alignment tape and confirm the RF waveform.
   (In the LP mode self-recording does not exist.)
3. In each mode, confirm that the difference of the amplitude (CH1 and CH2) is 65% or larger.
   (See Fig. 9)
   If it does not meet specification, change Drum Ass'y to a new Drum Ass'y.

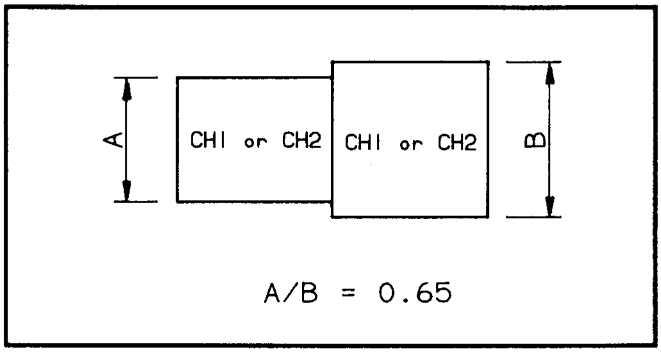


Fig. 9

4. CAMERA ADJUSTMENT

IMPORTANT SERVICE NOTICE

This camera system has E²PROM (IC308 of CAMERA MAIN PCB) which stores the digital auto focus.
When disassembling or assembling, precaution is needed about next points.

1. Readjustment is needed when lens assembly is removed from CCD PCB.
   The reason is that shiftness of zoom track or iris level occurs when CCD PCB and lens ass'y are reassembled after removed.
2. Readjustment is needed when E²PROM (IC308 of CAM Main PCB) and zoom lens ass'y are replaced.
   The reason is that E²PROM stores confirmed adjustment value of every adjustment steps.
   Therefore when replacing, adjustment is needed for store of data.
3. All adjustment steps of camera section should be performed with using the Remote Control.

4-1. PREPARATIONS

4-1-1. Equipment to be used

1) Oscilloscope
2) Digital voltmeter
3) Power supply
4) PAL vectorscope
5) PAL waveform monitor
6) PAL color monitor
7) Various charts
   - Color bar chart, Gray-scale chart, etc...
8) Alignment tape (SE1-2L)

4-1-2. Composition of Camera P.C.Boards

1) Camera Main PCB
2) Super Impose PCB
3) Lens Drive PCB
4) CCD PCB
5) EVF PCB

A/V JACK

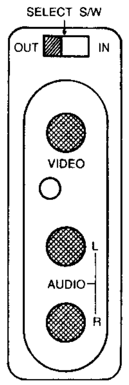


Fig. 1 A/V JACK

The location of TP302 and TP304

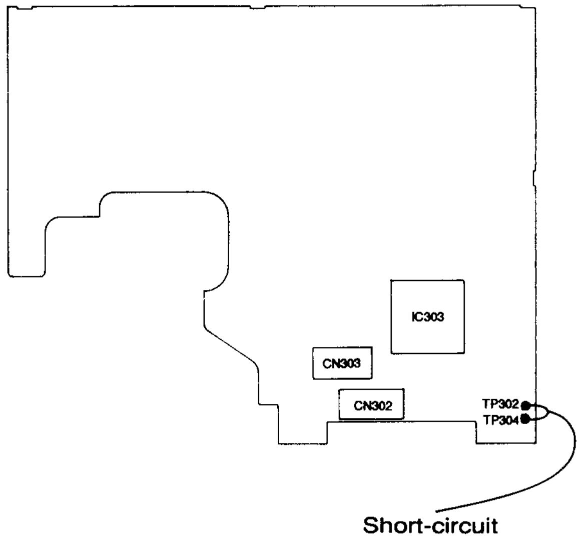


Fig. 2 CAMERA Main PCB (Top Side)

The location of hole 2 and hole 3

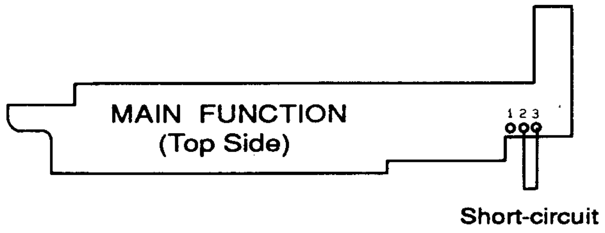


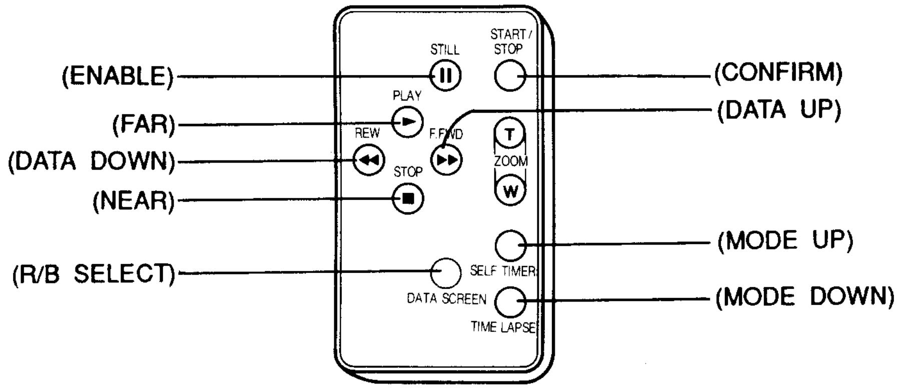
Fig. 3 Main Function PCB (Top Side)

Adjustment conditions when using the Remocon as a adjustment JIG

1. Set "IN/OUT Select S/W" of A/V JACK to "OUT" and connect the TV monitor. (See Fig. 1)
2. Short-circuit between TP302 and TP304 on the Camera Main PCB. (See Fig. 2)
3. Short-circuit between Hole2 and Hole3 on the Main Function PCB. (See Fig. 3)
4. Set "VIDEO/CAMERA" Select S/W to "CAMERA".
5. After finishing above steps, turn power on.
   Confirm that "MODE : AF DA" is displayed on the top of monitor.

Key functions when using the Remocon as a adjustment JIG

Only if short circuit between TP302 and TP304 on the Camera Main PCB and between Hole2 and Hole3 on the Main Function PCB is performed correctly, Remocon is operated as a adjustment JIG.



Remocon Key	Functions when using the Remocon as a JIG	Adjustment purpose
START/STOP	CONFIRM	DATA store after finishing adjustment by Mode.
STILL	ENABLE	Mode start key when adjusting AUTO FOCUS.
F.FWD	DATA UP	When Changing key RED/BLUE value of W/B.
REW	DATA DOWN	
SELF TIMER	MODE UP	Mode Change.
TIME LAPSE	MODE DOWN	
STOP	NEAR	FOCUS Adjustment.
PLAY	FAR	
ZOOM T	ZOOM T	TELE/WIDE Adjustment.
ZOOM W	ZOOM W	
DATA SCREEN	R/B SELECT	AUTO FOCUS, W/B Adjustment.

The display state on screen when changing mode

MODE : AF DA (EA) ──► ( ) indicates type when selecting R/B

When pressing the MODE UP key ↓

AE		
HELL	AUTO	R
COLOR	OUT	R
COLOR	IN	R
COLOR	AUTO	R

NOTE

* Be sure to remove the short-circuit point after finishing the adjustment.
* After finishing the adjustment, set "IN/OUT select S/W" of A/V JACK to "OUT" and then, perform the assembly process.

4-2. CAMERA MAIN SECTION

NOTE

The Camera System adjustment should be performed by steps.

STEP	ADJUSTMENT ITEM
1. MODE and INPUT SIGNAL/ALIGNMENT TAPE 2. TEST POINT and ADJ. part 3. RESULT & REMARKS	

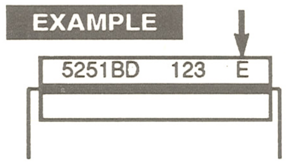
ADJ. part →

Test Point ⇢

2 | V OFD

1. CAMERA "E-E", no signal input.
2. TP105 & VR101.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * V OFD specified voltage is indicated by one digit. (Side of the CCD image sensor)
   * Connect digital voltameter probe to TP105.
   * Adjust VR101 so that V OFD is the specified voltage (DC).

EXAMPLE


5251BD 123 E

(Side of CCD Image Sensor)

★ 5251BD : CCD Device name

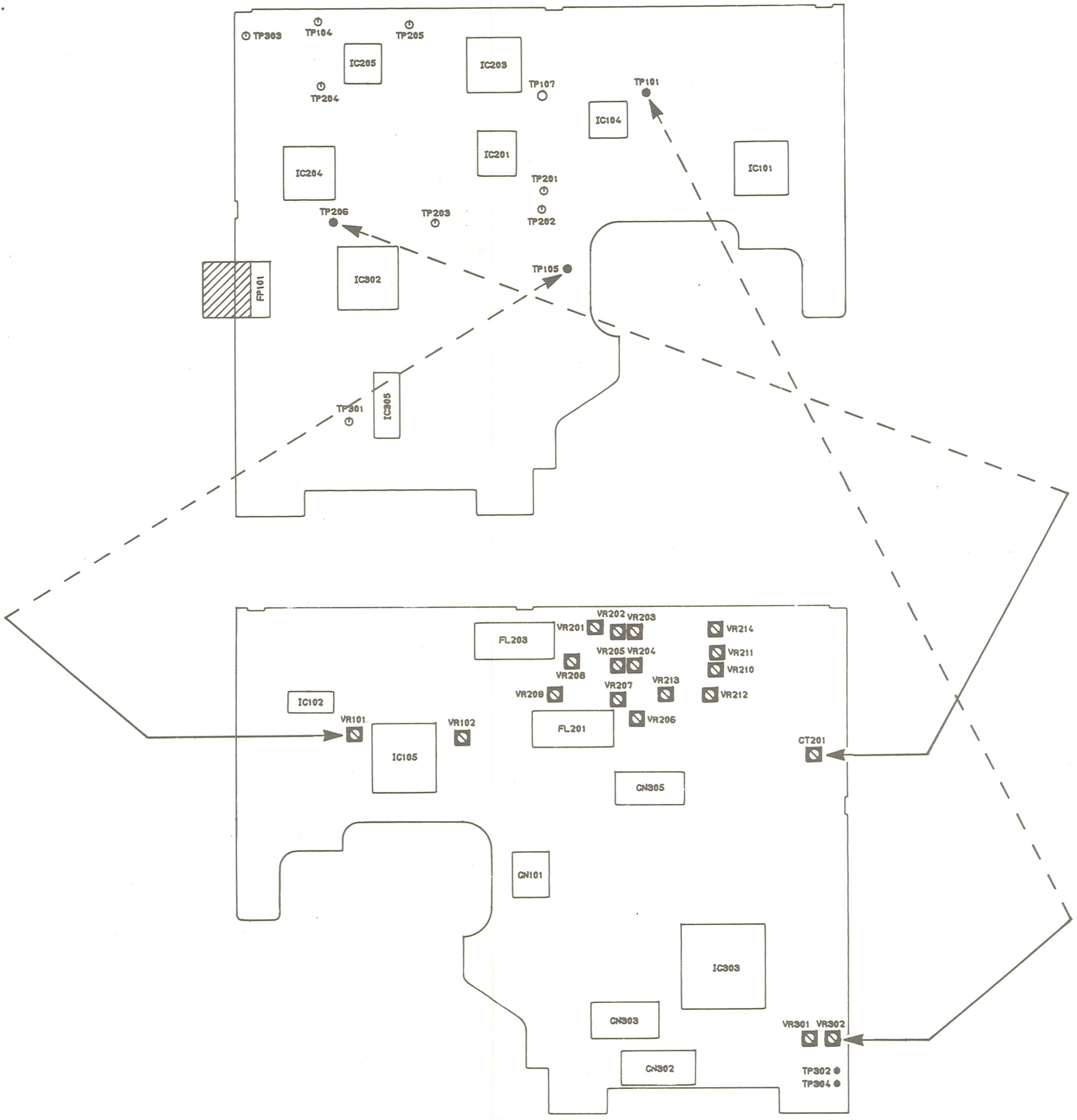
★ 123 : Lot name

★ E : V OFD voltage code address E = 9.0V

(Table for V OFD Voltage)

Digit	V OFD Voltage	Digit	V OFD Voltage	Digit	V OFD Voltage
2	3.0V	D	8.5V	Q	14.0V
3	3.5V	E	9.0V	R	14.5V
4	4.0V	F	9.5V	S	15.0V
5	4.5V	G	10.0V	T	15.5V
6	5.0V	H	10.5V	U	16.0V
7	5.5V	J	11.0V	V	16.5V
8	6.0V	K	11.5V	W	17.0V
9	6.5V	L	12.0V	X	17.5V
A	7.0V	M	12.5V	Y	18.0V
B	7.5V	N	13.0V	Z	18.5V
C	8.0V	P	13.5V	-	-

CAMERA MAIN PCB (BOTTOM SIDE)


TP303
TP104
TP205
IC205
IC203
TP107
TP101
TP204
IC104
IC201
IC101
IC204
TP201
TP206
TP203
TP202
TP105
IC302
FP101
TP301
IC305
FL203
VR201
VR202
VR203
VR214
VR205
VR204
VR211
VR208
VR210
VR213
VR207
VR208
VR212
IC102
VR101
VR102
VR206
FL201
CT201
IC105
CN305
CN101
IC303
CN303
VR301
VR302
CN302
TP302
TP304

CAMERA MAIN PCB (TOP SIDE)

1 | AUTO FOCUS

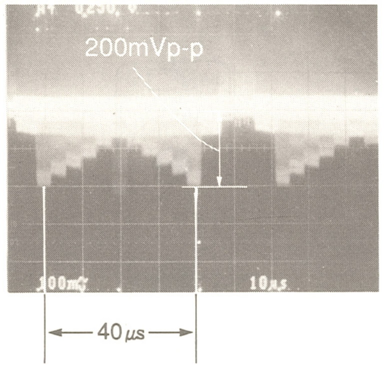
1. CAMERA "E-E".
2. Focus Chart (See the end of S/M).
3. 1) Set the power switch of the set to the "CAMERA" position.
   2) Place the focus chart attached to the end of S/M so that distance between camera lens and focus chart is 3M.
   3) Confirm that "MODE : AF DA" is displayed on the screen.
   4) Press the ENABLE key and then, confirm that mode is changed from "DA" to "EA" and zoom position is "TELE" state.
   5) Push the NEAR/FAR key so that focus state moves to the just focus on the focus chart.
   6) Push the R/B SELECT key so that zoom position is "TELE"
   7) If focus isn't just point, perform above item 5) again.
   8) If R/B SELECT key is pressed zooming state isn't changed, press the "CONFIRM" key.

3 | 4 fsc

1. CAMERA "E-E", no signal input.
2. TP206 & CT201.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Connect digital voltameter probe to TP206.
   * Adjust CT201 so that the voltage is DC 2.5 ± 0.2V.

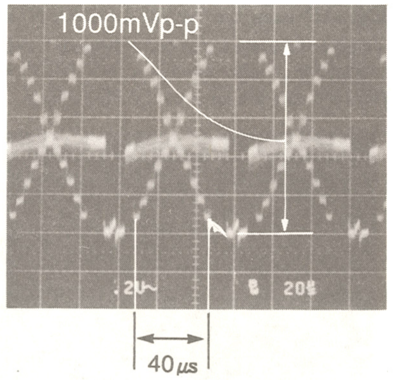
4 | AUTO IRIS

1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. TP101 & VR302.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40μs in waveform monitor)
   * Connect an oscilloscope CH-1 to TP101.
   * Adjust VR302 so that the signal level is 200mVp-p.
   * Be sure to push the "CONFIRM" key.



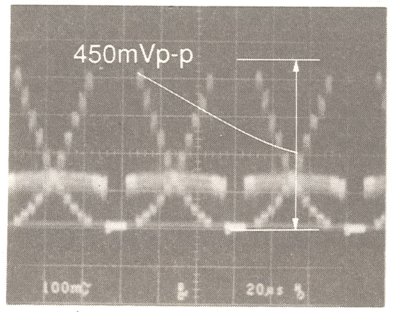
6 YH LEVEL

1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. TP205 & VR201.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40µs in waveform monitor)
   * Connect an oscilloscope CH-1 to TP205.
   * Adjust VR201 so that the signal level is 1000mVp-p.

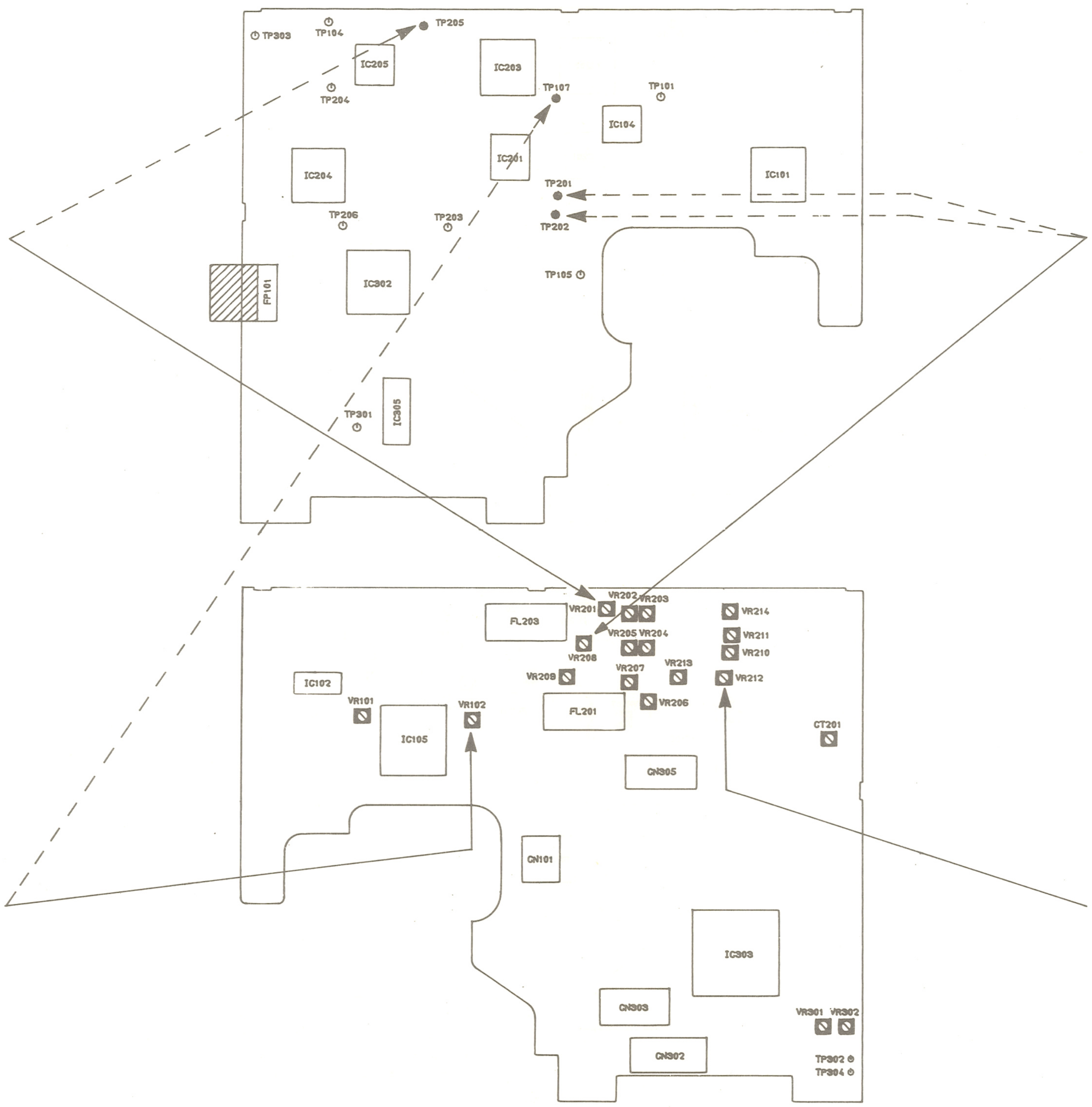


5 AGC GAIN

1. CAMERA "E-E", no signal input.
2. TP107 & VR102
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Connect an oscilloscope CH-1 to TP107.
   * Adjust VR102 so that the signal level is 450mVp-p.
   * Be sure to push the "CONFIRM" key.



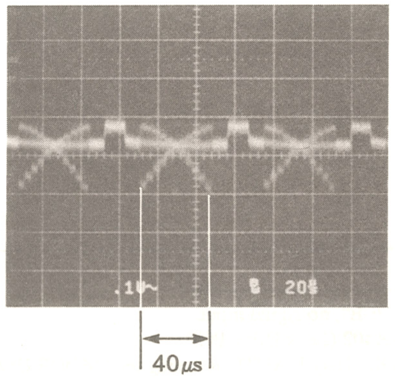
CAMERA MAIN PCB (BOTTOM SIDE)


TP303
TP104
TP205
IC205
IC203
TP204
TP107
TP101
IC104
IC204
IC201
IC101
TP201
TP202
TP206
TP203
FP101
IC302
TP105
TP301
IC305
VR202
VR203
VR201
VR214
FL203
VR205
VR204
VR211
VR208
VR210
VR213
VR209
VR207
VR212
IC102
VR101
VR102
VR206
FL201
CT201
IC105
CN305
CN101
IC303
CN303
VR301
VR302
CN302
TP302
TP304

CAMERA MAIN PCB (TOP SIDE)

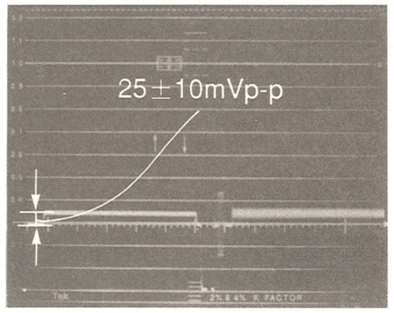
7 Y2 LEVEL

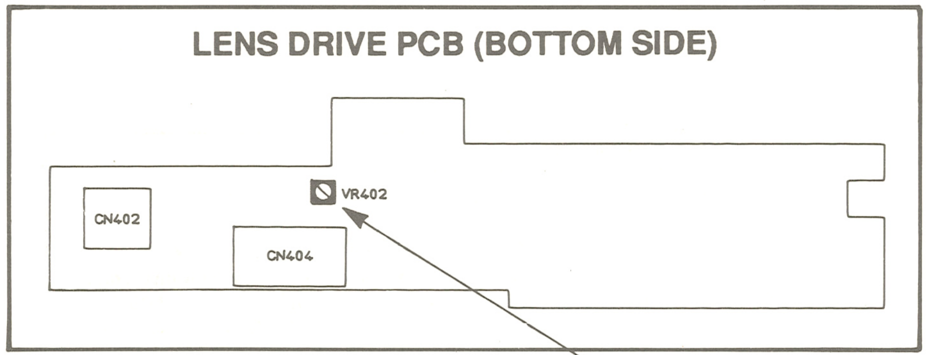
1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. TP201, TP202 & VR208.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40µs in waveform monitor)
   * Connect an oscilloscope's CH-1 to TP201 and CH-2 to TP202.
   * Adjust VR208 so that the signal of TP201 (Y_1) and TP202 (Y_2) are equal.

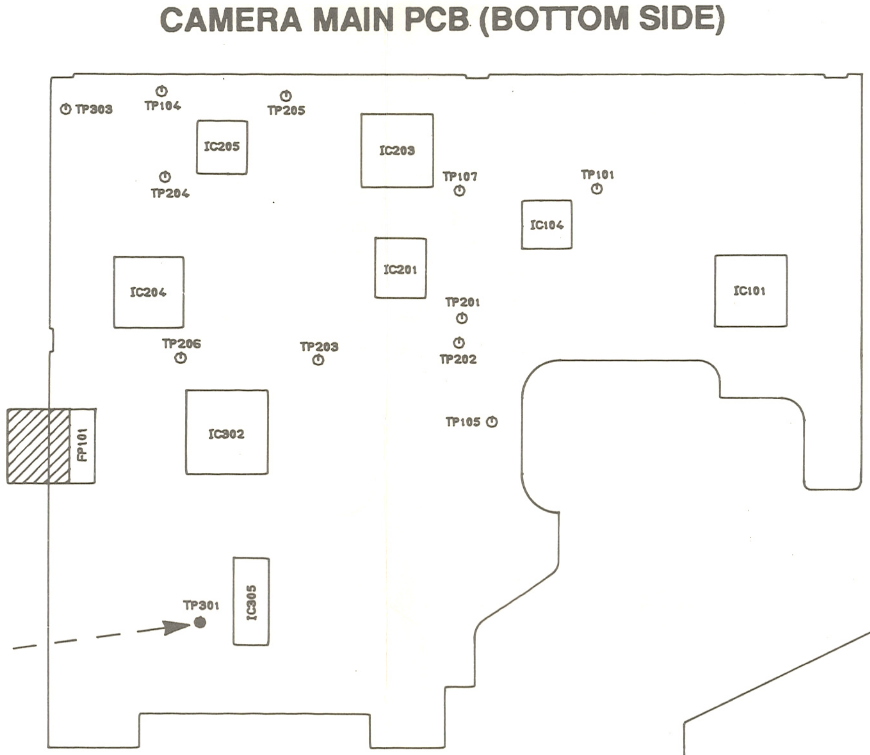


8 SET UP LEVEL

1. CAMERA "E-E", no signal input.
2. VIDEO terminal & VR212.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Close the camera lens cap.
   * Connect waveform monitor input jack to VIDEO terminal.
   * Adjust VR212 so that the set up level is 25 ± 10mVp-p.




LENS DRIVE PCB (BOTTOM SIDE)
CN402
VR402
CN404

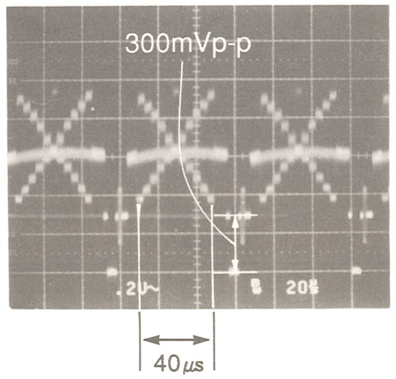

CAMERA MAIN PCB (BOTTOM SIDE)
TP303
TP104
TP205
IC205
IC203
TP107
TP101
TP204
IC104
IC201
IC204
IC101
TP201
TP206
TP203
TP202
IC302
TP105
FP101
TP301
IC305

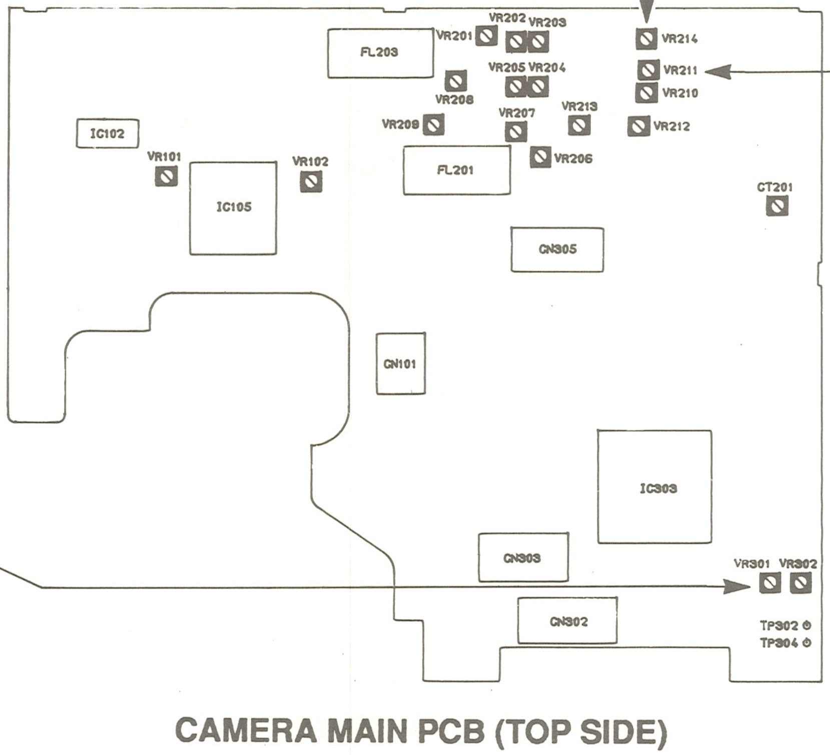
12 HALL

1. CAMERA "E-E", no signal input.
2. TP301 & VR402 (Lens Drive PCB)
3. * Set "MODE : HALL AUTO R" using the "MODE UP/DOWN" key.
   * Close the camera lens cap.
   * "MODE : HALL AUTO R" is iris closed state.
   * Connect digital voltameter probe to TP301.
   * Adjust VR402 so that the voltage is DC 1V.

9 SYNC LEVEL

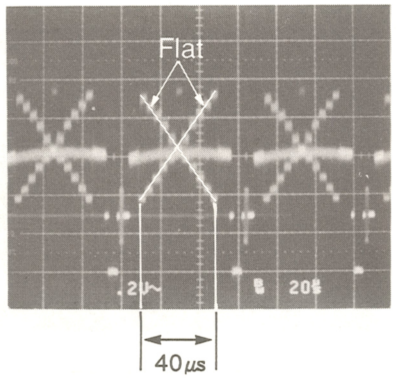
1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. VIDEO terminal & VR214.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40µs in waveform monitor)
   * Connect waveform monitor input jack to VIDEO terminal.
   * Adjust VR214 so that the sync level is 300mVp-p.




FL203
VR201
VR202
VR203
VR214
VR205
VR204
VR211
VR208
VR210
VR213
VR209
VR207
VR212
IC102
VR101
VR102
FL201
VR206
IC105
CT201
CN305
CN101
IC303
CN303
VR301
VR302
CN302
TP302
TP304
CAMERA MAIN PCB (TOP SIDE)

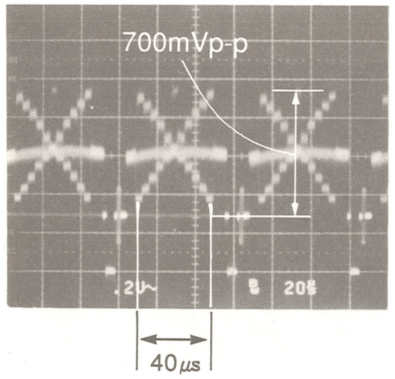
11 Y-γ LEVEL

1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. VIDEO terminal & VR301.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40µs in waveform monitor)
   * Connect waveform monitor input jack to VIDEO terminal.
   * Adjust VR301 so that the signal output state of the waveform monitor is flat.



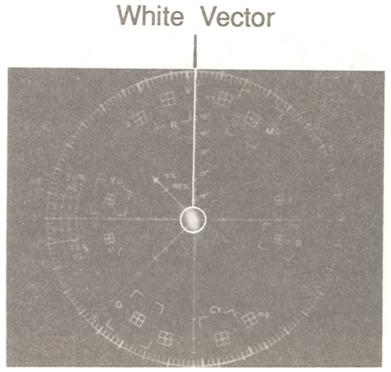
10 Y LEVEL

1. CAMERA "E-E", Gray-scale chart standard picture frame.
2. VIDEO terminal & VR211.
3. * Set "MODE : AE" using the "MODE UP/DOWN" key.
   * Aim the camera at a gray-scale chart. (40µs in waveform monitor)
   * Connect waveform monitor input jack to VIDEO terminal.
   * Adjust VR211 so that the Y level is 700mVp-p.

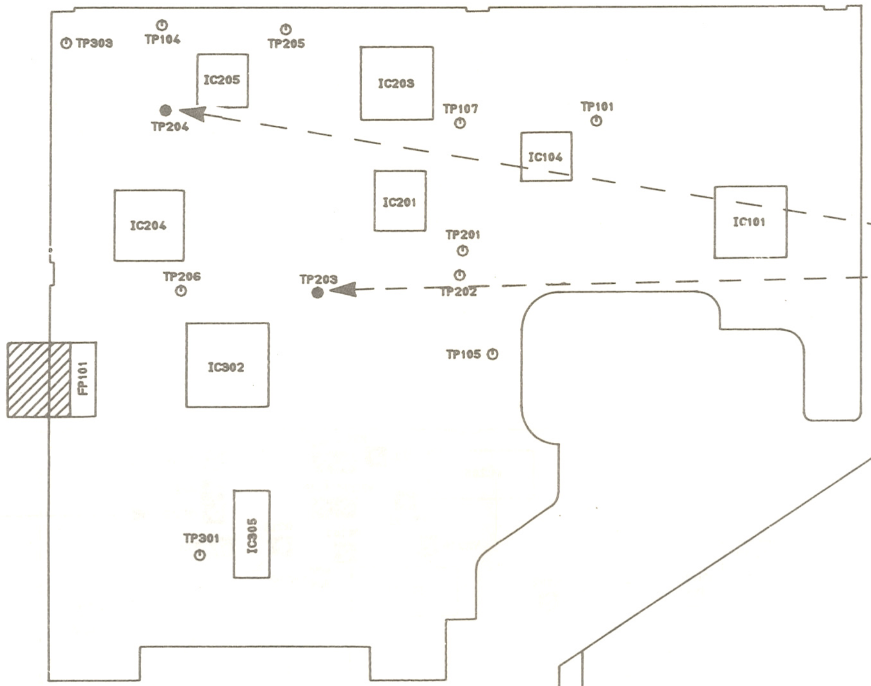


13 W/B OUTDOOR

1. CAMERA "E-E", 5100° K gray-scale chart.
2. VIDEO terminal.
3. * Set "MODE : COLOR OUT R" using the "MODE UP/DOWN" key.
   * Aim the camera at a 5100° K gray-scale chart.
   * Connect vectorscope input jack to VIDEO terminal.
   * Adjust the DATA (UP/DOWN) key so that the white vector moves to the center on screen of the vectorscope.
   * Be sure to push the "CONFIRM " key.

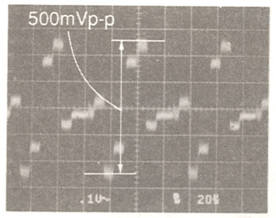

White Vector

CAMERA MAIN PCB (BOTTOM SIDE)

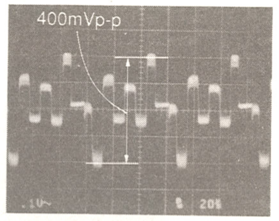

TP303
TP104
TP205
IC205
IC203
TP107
TP101
TP204
IC104
IC201
IC101
IC204
TP201
TP206
TP203
TP202
TP105
FP101
IC302
TP301
IC305

15 R-Y, B-Y

1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. TP203 (R-Y), TP204 (B-Y) & VR202 (R-Y), VR203 (B-Y).
3. * Set "MODE : COLOR IN R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a color bar chart.
   * Connect an oscilloscope CH-1 to TP203 (R-Y).
   * Adjust VR202 (R-Y) so that the signal level is 500mVp-p.
   * Connect an oscilloscope CH-1 to TP204 (B-Y).
   * Adjust VR203 (B-Y) so that the signal level is 400mVp-p.



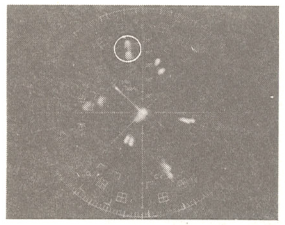
(R-Y)



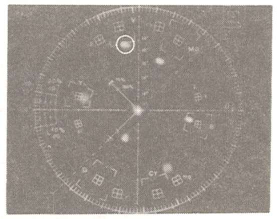
(B-Y)

14 C1 LEVEL

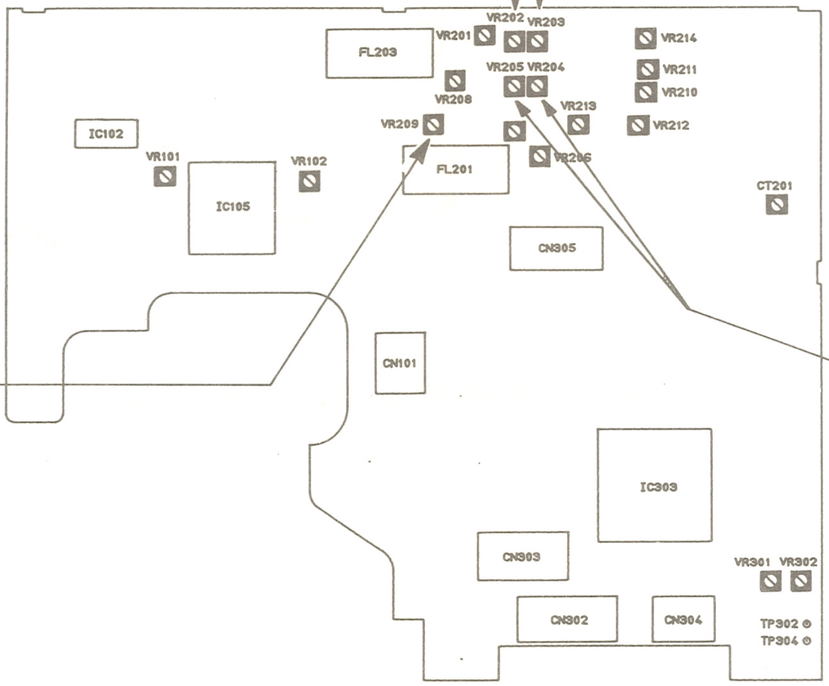
1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. VIDEO terminal & VR209.
3. * Set "MODE : COLOR IN R" using the "MODE UP/DOWN" key.
   * Aim the camera at a color bar chart.
   * Connect vectorscope input jack to VIDEO terminal.
   * Adjust VR209 so that the color vectors phase difference are 0°.



(Before Adjustment)



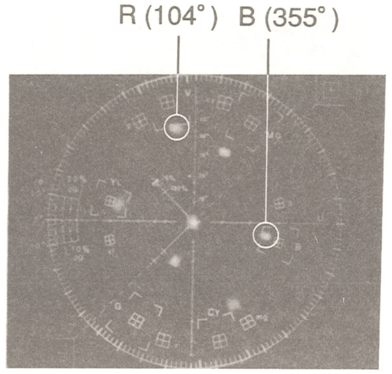
(After Adjustment)


FL203
VR201
VR202
VR203
VR214
VR205
VR204
VR211
VR210
VR208
VR213
VR209
VR212
IC102
VR101
VR102
IC105
FL201
VR206
CT201
CN305
CN101
IC303
CN303
VR301
VR302
CN302
CN304
TP302
TP304

CAMERA MAIN PCB (TOP SIDE)

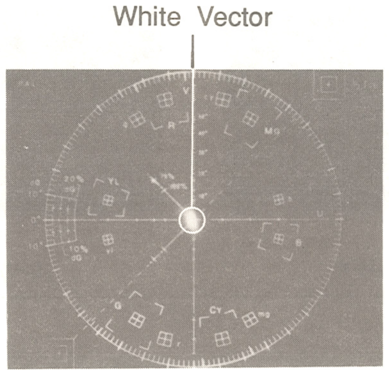
16 HUE LEVEL

1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. VIDEO terminal & VR204 (R-Y Hue), VR205 (B-Y Hue)
3. * Set "MODE : COLOR IN R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a color bar chart.
   * Connect vectorscope input jack to VIDEO terminal.
   * Adjust VR204 (R-Y), VR205 (B-Y) so that the level is R vector 104° and B vector 355°.



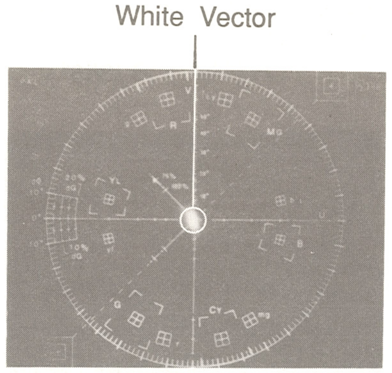
19 W/B INDOOR

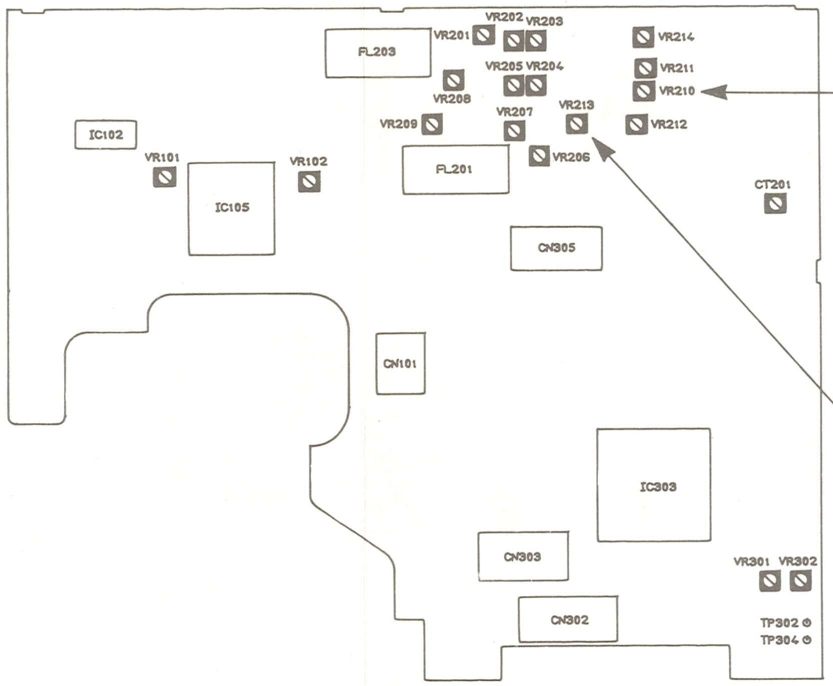
1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. VIDEO terminal.
3. * Set "MODE : COLOR IN R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a 3100° K color bar chart.
   * Connect vectorscope input jack toVIDEO terminal.
   * Adjust the DATA (UP/DOWN) key so that the white vector moves to the center on screen of the vectorscope.
   * Be sure to push the "CONFIRM " key.


White Vector
R
MG
YL

20 AUTO WHITE BALANCE

1. CAMERA "E-E", 5100° K gray-scale chart.
2. VIDEO terminal.
3. * Set "MODE : COLOR AUTO R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a 5100° K gray-scale chart.
   * Connect vectorscope input jack to VIDEO terminal.
   * Adjust the DATA (UP/DOWN) key so that the white vector moves to the center on screen of the vectorscope.
   * Be sure to push the "CONFIRM " key.

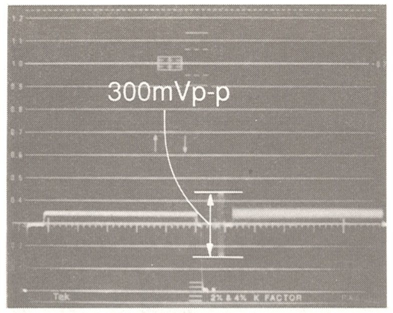

White Vector
MG
CY


VR202
VR203
VR201
FL203
VR214
VR205
VR204
VR211
VR208
VR210
VR207
VR213
VR209
VR212
IC102
VR101
VR102
FL201
VR206
IC105
CT201
CN305
CN101
IC303
CN303
VR301
VR302
CN302
TP302
TP304

CAMERA MAIN PCB (BOTTOM SIDE)

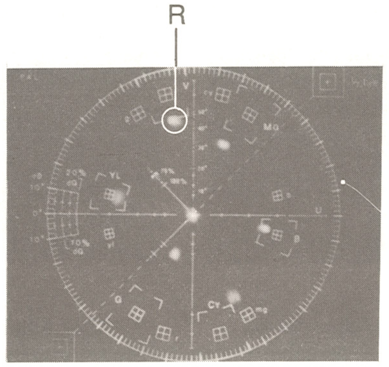
18 BURST LEVEL

1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. VIDEO terminal & VR210.
3. * Set "MODE : COLOR IN R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a color bar chart.
   * Connect waveform monitor input jack to VIDEO terminal.
   * Adjust VR210 so that the burst level is 300mVp-p.



17 COLOR LEVEL

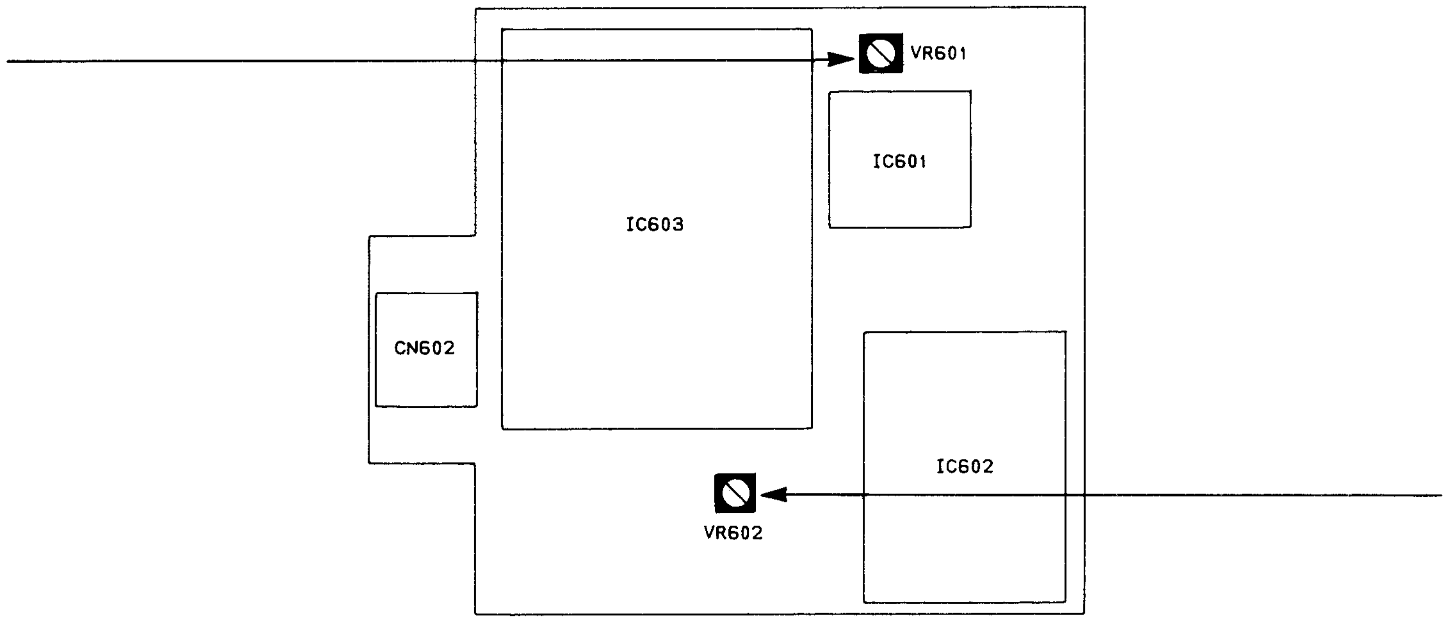
1. CAMERA "E-E", Color bar chart standard picture frame. (3100° K)
2. VIDEO terminal & VR213.
3. * Set "MODE : COLOR IN R (B)" using the "MODE UP/DOWN" key.
   * Aim the camera at a color bar chart.
   * Connect vectorscope input jack to VIDEO terminal.
   * Adjust VR213 so that the R vector moves to the "R" character on screen.



4-3. SUPER IMPOSE SECTION

1 SUPER IMPOSE FREQUENCY

1. CAMERA "E-E", no signal input.
2. VIDEO terminal & VR601.
3. * Set WIPE mode using the "COLOR/MODE" button of CAM Function PCB.
   * Set " □ " mode using the WIPE button.
   * Confirm that color is covered from outside to inside using the "TITLE" button and then, adjust VR601 so that right and left is regular interval.



SUPER IMPOSE PCB (TOP SIDE)

2 SUPER IMPOSE LEVEL

1. CAMERA "E-E", 5100°K gray-scale chart.
2. VIDEO terminal & VR602.
3. * Aim the camera at a gray-scale chart.
   * Press the "MEMORY" key on the CAM Function PCB.
   * Adjust VR602 so that four step of gray-scale chart is duplicated using the "MEMORY" key.

4-4. E.V.F SECTION

1 AFC

1. VTR "PB", Alignment tape SE1-2L (Lion pattern).
2. TP(AFC) & VR701.
3. * Connect digital voltameter probe to TP(AFC).
   * Adjust VR701 so that the voltage is DC 2.4V.

2 BRIGHT

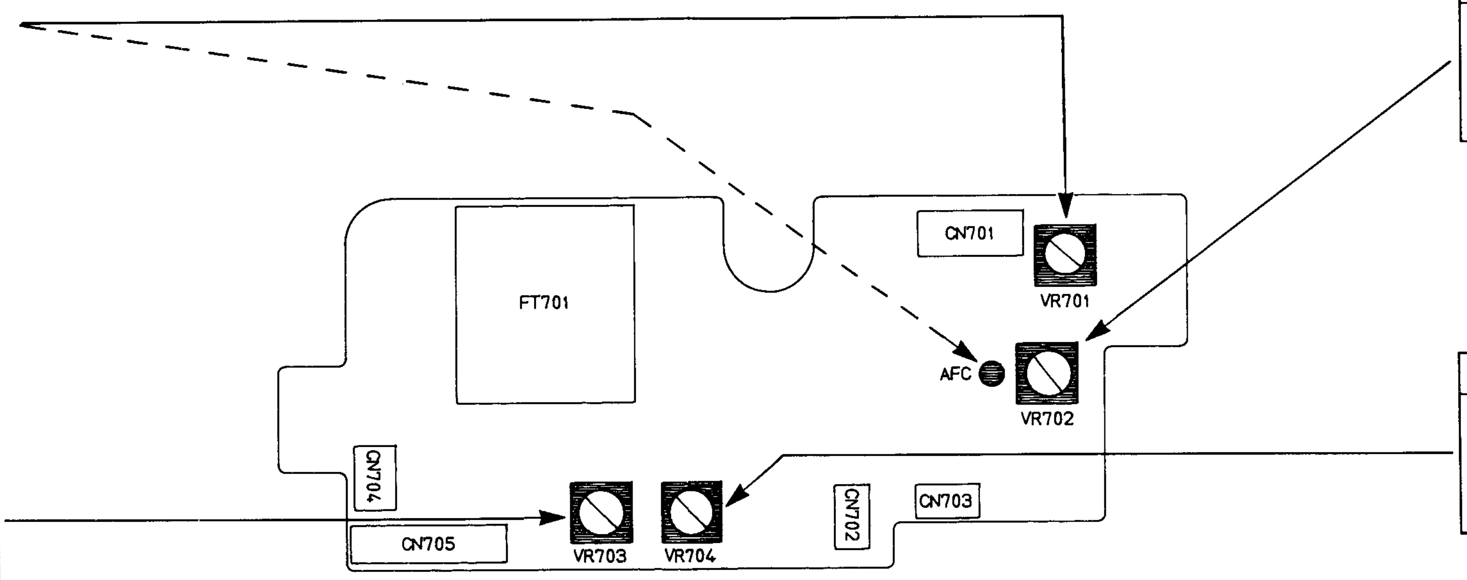
1. VTR "PB", Alignment tape SE1-2L (Lion pattern).
2. Viewfinder & VR704.
3. * Adjust the VR704 so that the stair on the lion pattern is distinguished 3th and 4th stairs.

3 V. SIZE

1. VTR "PB", Alignment tape SE1-2L (Lion pattern).
2. Viewfinder & VR702.
3. * Adjust the VR702 so that the center circle on the lion pattern is perfect circle.

4 FOCUS

1. VTR "PB", Alignment tape SE1-2L (Lion pattern).
2. Viewfinder & VR703.
3. * Adjust the VR703 for best resolution in the viewfinder.



E.V.F PCB (TOP SIDE)

5. VTR ADJUSTMENT

5-1. PREPARATIONS

Use the following measuring instruments for adjustment of the VTR block.

5-1-1. Equipment to be used

1) Monitor TV
2) Dual trace oscilloscope of over 10MHz band, incorporates delay mode. (Use 10 : 1 probe unless otherwise specified)
3) Frequency counter
4) Pattern generator with video output terminal
5) Digital voltmeter
6) Audio generator
7) AC voltmeter
8) Regulated power supply
9) Alignment tapes
   Video frequency characteristics adjustment (SEM-2L)
   Operation check (SE2-2L : LP), (SE2-2 : SP)
   (SE2-2S : SP - STEREO)

5-1-2. Composition of VTR P.C.Boards

1) Main PCB (System Control/Servo, Video, Pre-Amp)
2) Audio PCB
3) Main Function PCB
4) DC/DC Converter PCB
5) Start/Stop PCB
6) MIC PCB

5-1-3. Connection of equipment

Unless otherwise specified, adjustment is made with the measuring instrument connected as shown in the diagram below.

- Camera/video power switch ..... Video position

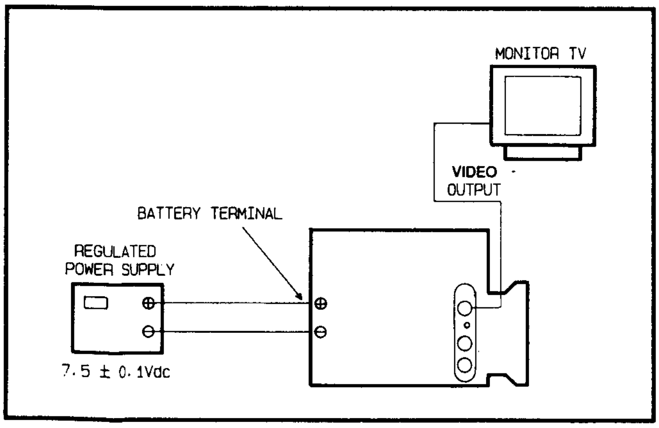


Fig. 1

5-1-4. Set-up during adjustment

Since the video output signal obtained from the pattern generator is used as the adjusting signal for the VTR block, it is necessary that this video output signal be within the required specifications. Connect an oscilloscope to A/V JACK (video terminal) and make sure that the amplitude of the video SYNC signal is approximately 0.3V, that the video block amplitude is approximately 0.7V, that the burst signal amplitude is approximately 0.3V with flat characteristics, and the signal level ratio between the burst signal and "Red" signal is 0.30 : 0.66. The video signal (color bars) used for VTR block electrical adjustment are shown in Fig. 2.

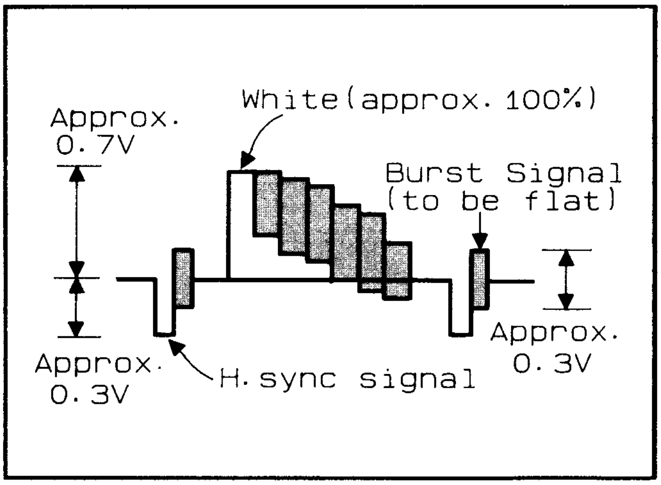
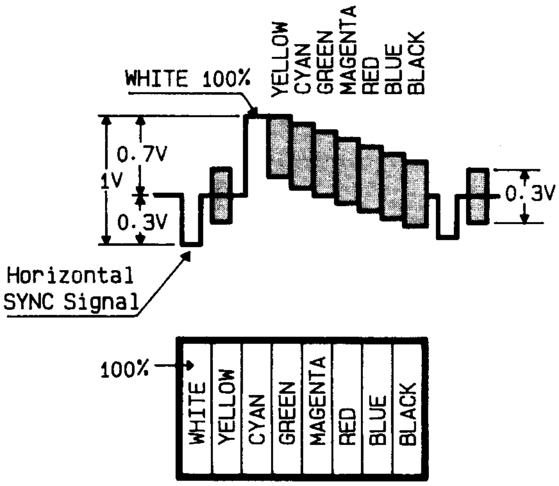


Fig. 2 Color bar signal of pattern generator

5-1-5. Alignment tapes

Tape	Content	Use
Tracking (SE4-2L)	1. Recording area : PCM - video 2. Recording content : CH2 : 1 MHz linearity adjustment signal (CH1 : 9 MHz)	Drum linearity adjustment
Video Frequency Response (SEM-2L)	1. Recording area : Video 2. Recording content : RF sweep 0 to 10 MHz 3. Maker 1, 3.58, 5.5 and 7 MHz	Frequency response adjustment
Operation Check SP mode (SE2-2) LP mode (SE2-2L) **Note :** PCM area is not included in SE2-2L Stereo (SP mode) (SE2-2S)	1. Recording area : Video 2. Recording content : ■ Video area • Video signal Color bars (Color bars)  WHITE 100% YELLOW CYAN GREEN MAGENTA RED BLUE BLACK 0.7V 1V 0.3V 0.3V Horizontal SYNC Signal 100% WHITE YELLOW CYAN GREEN MAGENTA RED BLUE BLACK • Video signal Color bars • Audio signals L CH ; 400Hz R CH ; 1KHz	Operation check

5-2. DC/DC CONVERTER SECTION

NOTE

From now on, the structure of every adjustment is as follows.

STEP	ADJUSTMENT ITEM
1. MODE and INPUT SIGNAL/ALIGNMENT TAPE 2. TEST POINT and ADJ. part 3. RESULT & REMARKS	

ADJ. part →

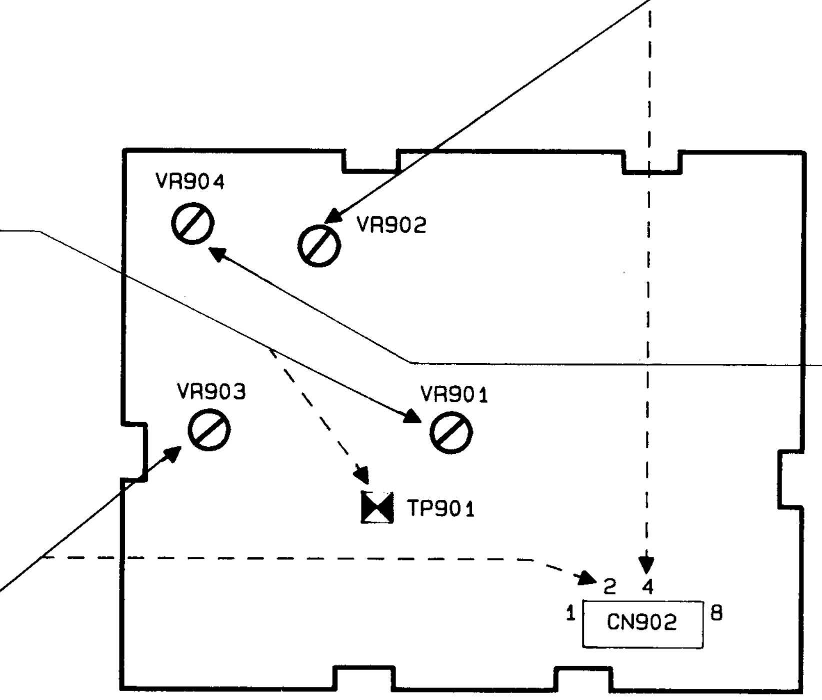
Test Point ⇢

1	PWM FREQUENCY

1. CAMERA, no signal input.
2. TP901 & VR901.
3. * Connect frequency counter probes to TP901.
   * Adjust VR901 so that the frequency counter becomes 447 ± 5KHz.

2	DC 15V

1. CAMERA, no signal input.
2. Pin 2 of CN902 & VR903.
3. * Connect digital voltmeter probes to pin 2 of CN902.
   * Adjust VR903 so that the digital voltmeter becomes DC 15 ± 0.1V.



DC/DC CONVERTER PCB (TOP SIDE)

3	DC 4.9V

1. CAMERA, no signal input.
2. Pin 4 of CN902 & VR902.
3. * Connect digital voltmeter probes to pin 4 of CN902.
   * Adjust VR902 so that the digital voltmeter becomes DC 4.9 ± 0.1V.

4	BATTERY DOWN VOLTAGE

CONNECTIONS

◆ Connect a regulated power supply and digital voltmeter as shown in Fig. 1.

◆ Connect hole 1 and hole 2 of Main Function board with a jumper wire.

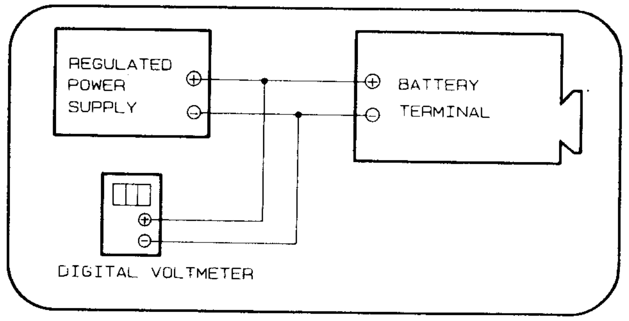


Fig. 1

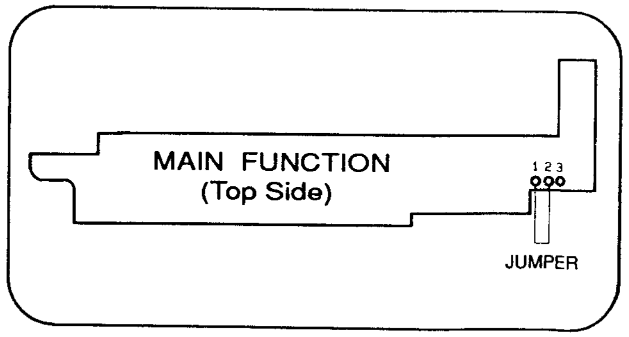


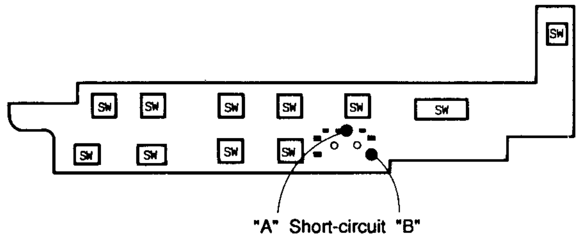
Fig. 2

1. CAMERA Recording, no signal input.
2. Monitor Screen & VR904.
3. * Press the START/STOP button for camera recording.
   * Confirm that the indication on the digital voltmeter is DC 5.6 ± 0.1 V.
   * Press "DATA SCREEN" key on the Camera Function board to display the counter on the monitor screen.
   * Adjust VR904 so that the counter data is 0:02:88 ~ 0:02:90.

5-3. VIDEO SECTION

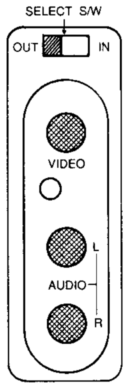
HOW TO RECORD

Use this method only when VTR is adjusted at recording mode.
- Short-circuit "A" and "B" point on Main Function board (Top side) as shown in Fig.



SW
"A" Short-circuit "B"

A/V JACK

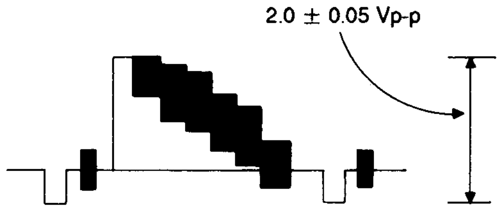


SELECT S/W
OUT
IN
VIDEO
L
AUDIO
R

- * Only if "Case Right Ass'y" is disassembly, "IN/OUT Select S/W" is showed.
- * After finishing the adjustments, be sure to set "IN/OUT select S/W" of A/V JACK to "OUT" and then, perform the assembling process.

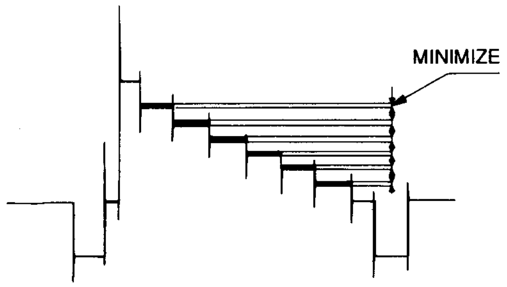
1 VIDEO OUT LEVEL

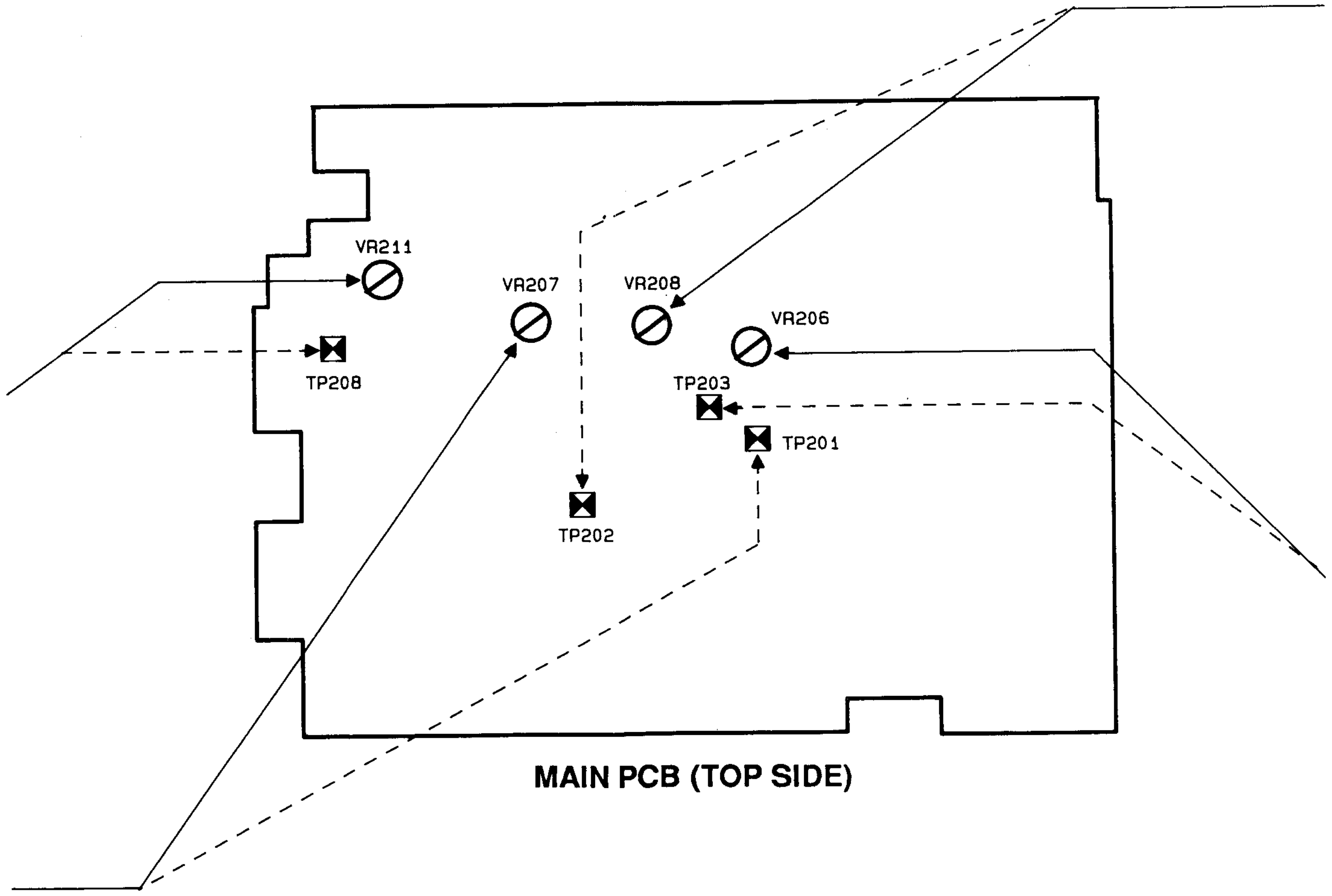
1. "E-E", Color bar signal (Video terminal connect A/V JACK).
2. TP208 & VR211.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   - * Connect an oscilloscope to TP208.
   - * Adjust VR211 for 2.0 ± 0.05Vp-p from sync tip to white peak level.



4 Y/C SEPARATION

1. "REC", Color bar signal (Video terminal connect A/V JACK).
2. TP201 & VR207.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   - * Connect an oscilloscope to TP201.
   - * Adjust VR207 so as to minimize the residual chroma component.



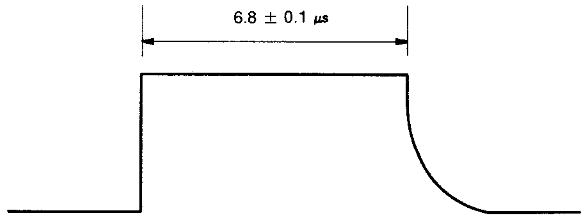


VR211
VR207
VR208
VR206
TP208
TP203
TP201
TP202

MAIN PCB (TOP SIDE)

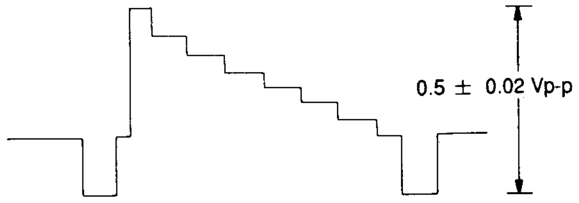
2 IR2

1. "REC", Color bar signal (Video terminal connect A/V JACK).
2. TP202 & VR208.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   - * Connect an oscilloscope to TP202.
   - * Adjust VR208 so as to align 6.8 µs at the falling edge(⌝).



3 EMPHASIS INPUT LEVEL

1. "REC", Color bar signal (Video terminal connect A/V JACK).
2. TP203 & VR206.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   - * Connect an oscilloscope to TP203.
   - * Adjust VR206 for 0.5 ± 0.02Vp-p from sync tip to white peak level.

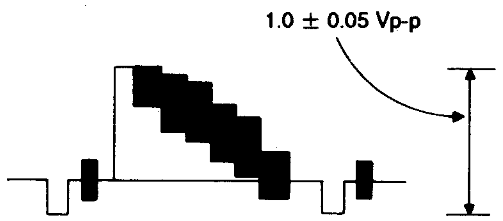


7 Y-FM DEVIATION

NOTE : Confirm that "PB Y LEVEL" and "Y FM CARRIER FREQUENCY" adjustment have completed.

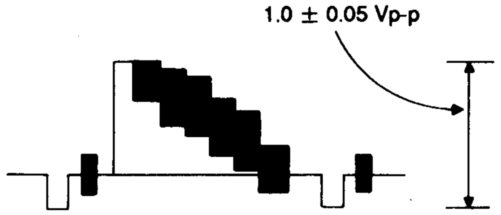
1. "REC → PB", Color bar signal (Video terminal connect A/V JACK).
2. TP208 & VR204.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   * Record the color bar signal.
   * Playback the recorded signal.
   * Confirm the playback output. (Specified value ; 1.0 ± 0.05Vp-p)
   * If the specified value is not satisfied, repeat 1 to 3 after turning VR204 in the following manner.

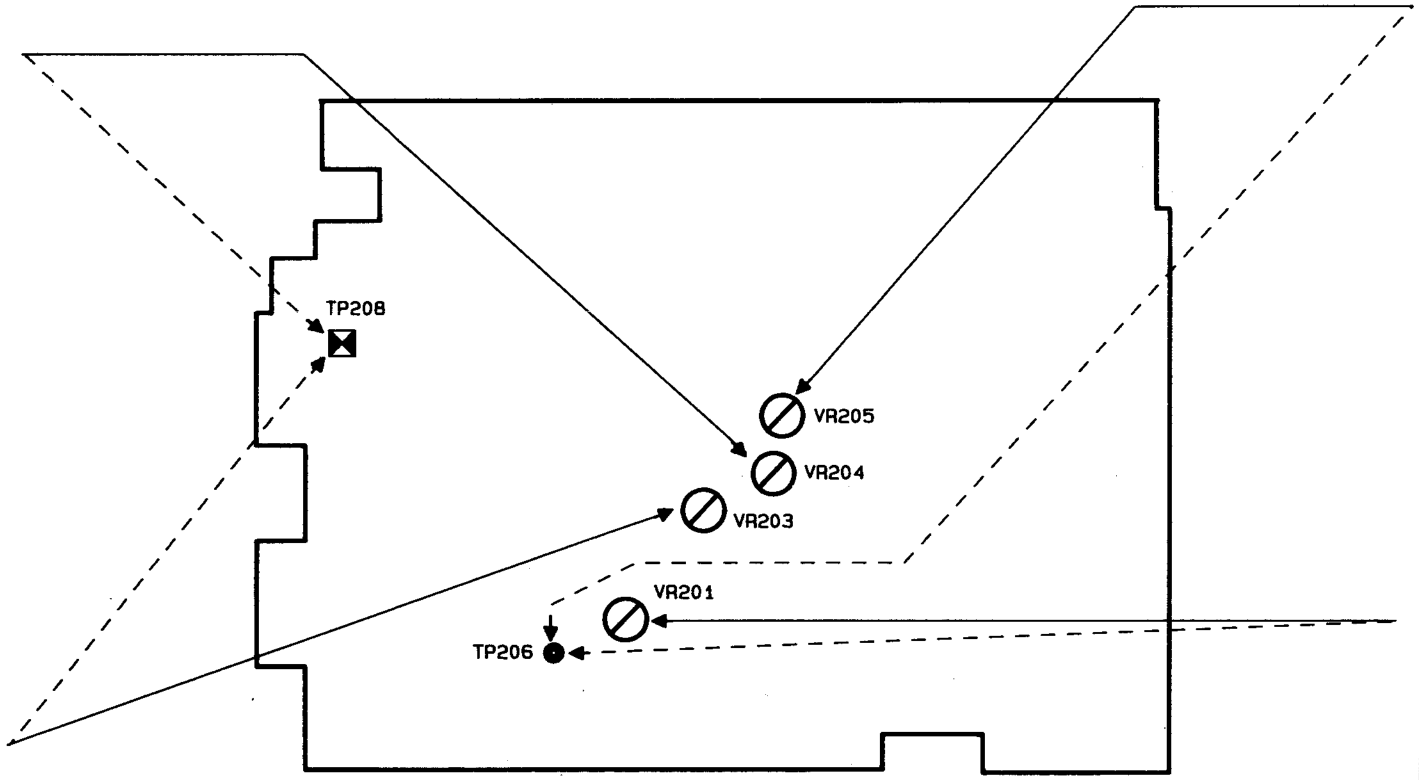
	Rotation direction of VR204
When larger than specified value	Counterclockwise (↺)
When smaller than specified value	Clockwise (↻)



5 PB Y LEVEL

1. "PB", Alignment tape SE2-2.
2. TP208 & VR203.
3. * Connect an oscilloscope to TP208.
   * Adjust VR203 for 1.0 ± 0.05Vp-p from sync tip to white peak level.





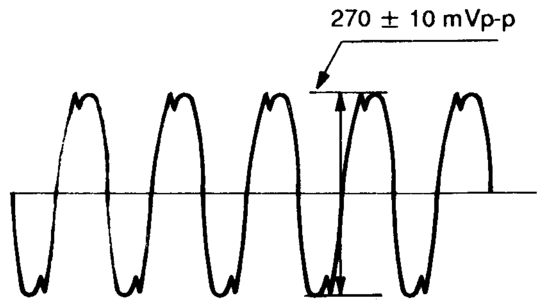
MAIN PCB (TOP SIDE)

6 Y-FM CARRIER FREQUENCY

1. "REC", No signal input.
2. TP206 & VR205.
3. * Connect frequency probe to TP206.
   * Adjust VR205 so that the frequency is 4.36 ± 0.05MHz.

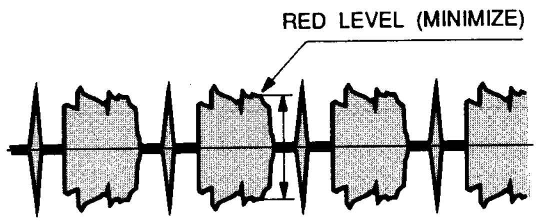
8 REC Y CURRENT

1. "REC", No signal input.
2. TP206 & VR201.
3. * Connect an oscilloscope to TP206.
   * Adjust VR201 so that the signal level becomes 270 ± 10mVp-p.



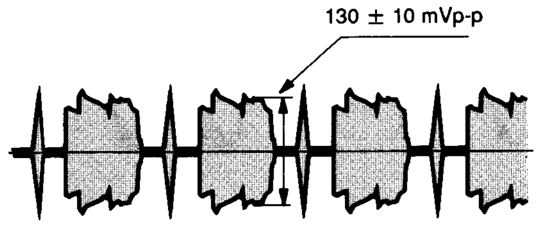
9 CHROMA EMPHASIS fo

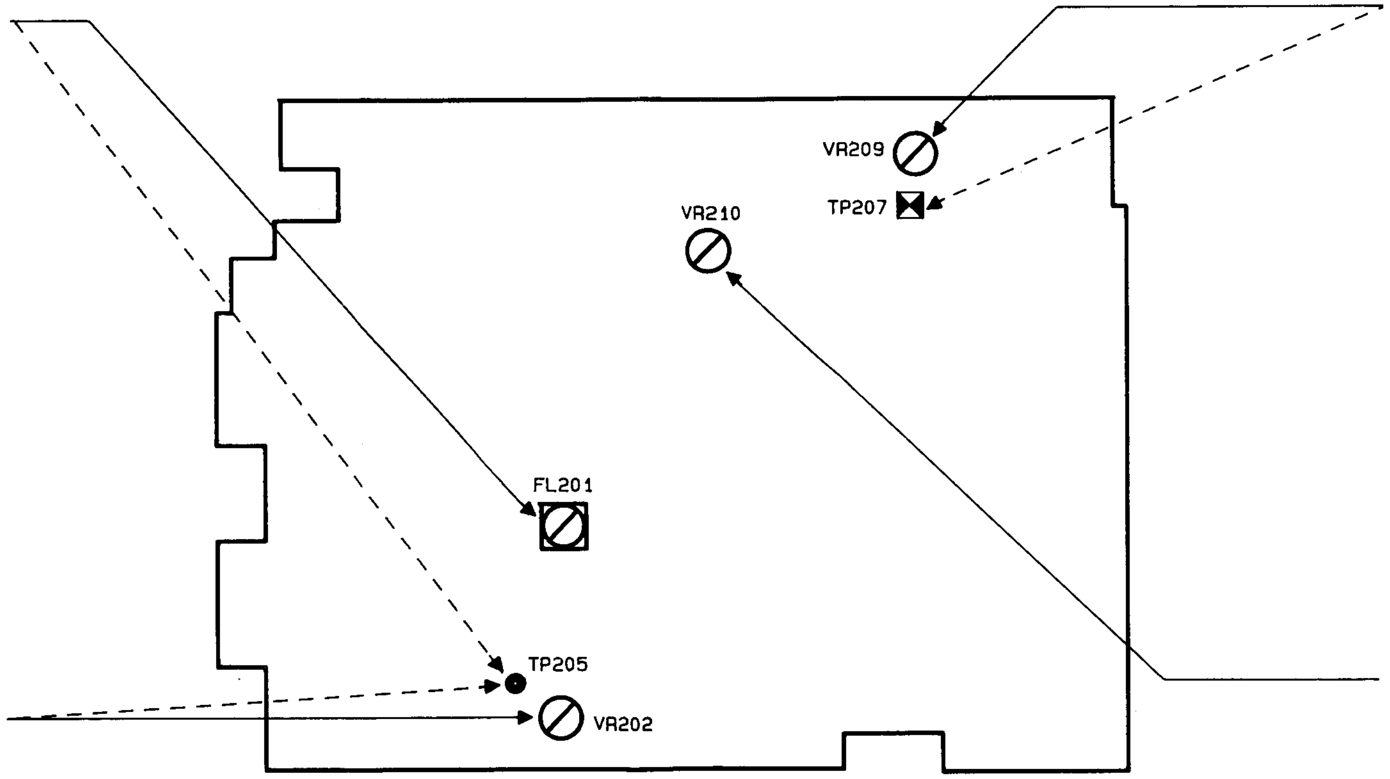
1. "REC", Color bar signal (Video terminal connect A/V JACK).
2. TP205 & FL201.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   * Connect an oscilloscope to TP205.
   * Adjust FL201 so as to minimize amplitude of the chroma signal red flat portion.



10 REC C CURRENT

1. "REC", Color bar signal (Video terminal connect A/V JACK).
2. TP205 & VR202.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   * Connect an oscilloscope to TP205.
   * Adjust VR202 so that the red level of the signal becomes 130 ± 10 mVp-p.

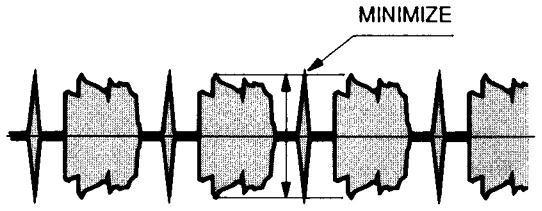




MAIN PCB (TOP SIDE)

11 COLOR NOISE REDUCTION

1. "PB", Alignment tape SE2-2.
2. TP207 & VR209.
3. * Connect an oscilloscope to TP207.
   * Adjust VR209 so as to minimize the chroma signal level.



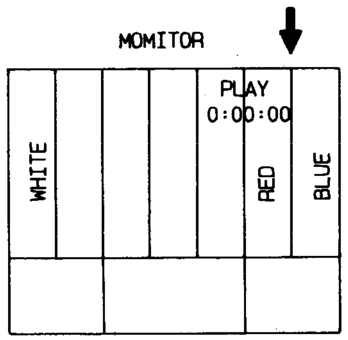
12 APC

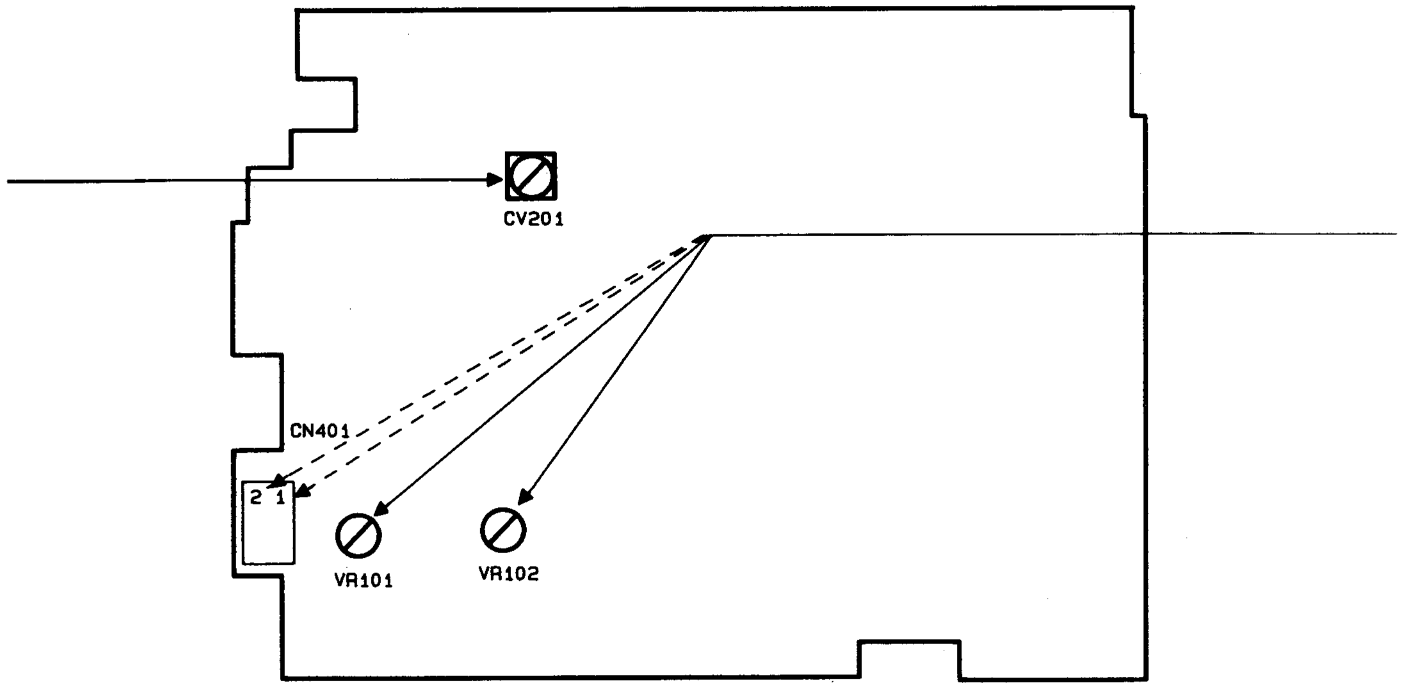
1. "LP-PB", Alignment tape SE2-2L.
2. VIDEO terminal (A/V JACK) & VR210.
3. * Set "IN/OUT select S/W" of A/V JACK to "OUT".
   * Set the monitor TV color level to maximum and its bright level to minimum.
   * Connect monitor TV jack to Video out terminal (A/V JACK).
   * Adjust VR210 so as to minimize chroma flicker.

5-4. PRE-AMP SECTION

13 OSD POSITION

1. "PB", Alignment tape SE2-2.
2. VIDEO terminal (A/V JACK) & CV201.
3. * Set "IN/OUT select S/W" of A/V JACK to "OUT".
   * Connect monitor TV jack to Video terminal on the A/V JACK.
   * Adjust CV201 so that last number of center line on the line that is between red and blue on PB screen.


MOMITOR
PLAY
0:00:00
WHITE
RED
BLUE

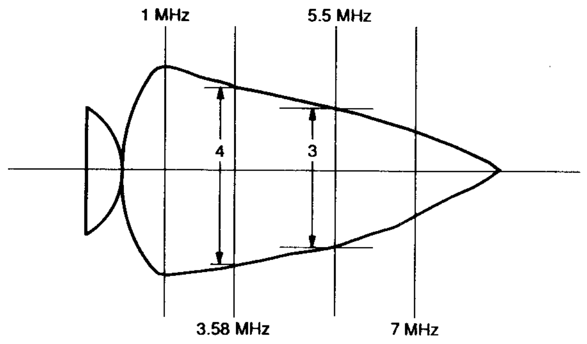

CV201
CN401
2 1
VR101
VR102

MAIN PCB (TOP SIDE)

1 FREQUENCY CHARACTERISTIC

1. "PB", Alignment tape SEM-2L.
2. Pin 1 and Pin 2 of CN401 (Trigger slope : + (-)) & VR101 (VR102).
3. * Connect an oscilloscope's CH-1 to pin 2 of CN401 for triggering and CH-2 to pin 1 of CN401.
   * Adjust VR101 (VR102) so that the ratio of the 3.58MHz level to the 5.5MHz level is 4 : 3.

NOTE : Items between square brackets ( ) indicate the adjusting element for channel-2.


1 MHz
5.5 MHz
4
3
3.58 MHz
7 MHz

5-5. SERVO SECTION

2 HEAD SWITCHING POINT

CONNECTIONS

◆ Connect hole 1 and hole 2 of Main Funcion board with a jumper wire. (See Fig. 1)

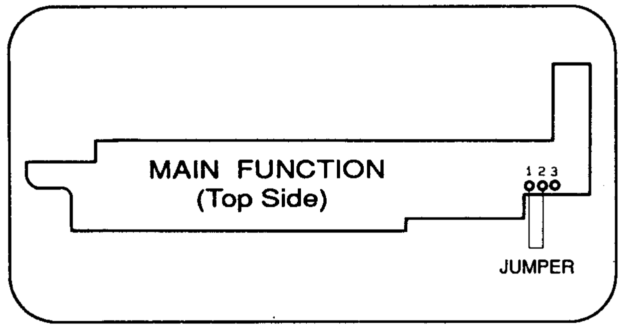
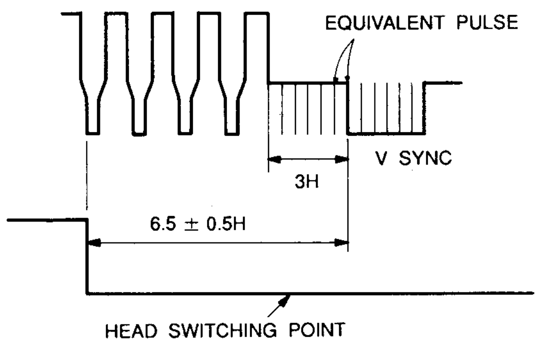
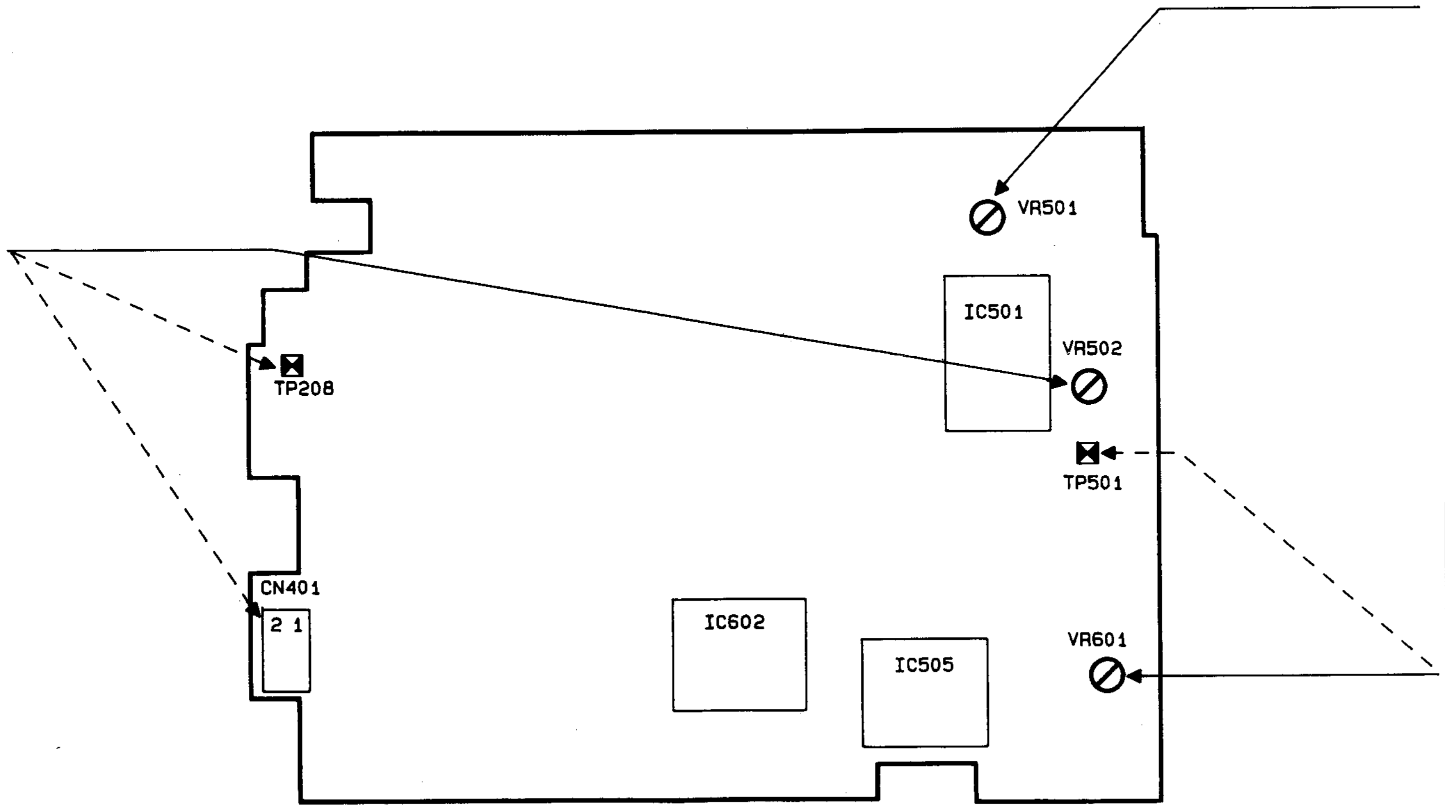

MAIN FUNCTION
(Top Side)
1 2 3
JUMPER

Fig. 1

1. "PB", Alignment tape SE2-2.
2. TP208 (Video Out), Pin 2 of CN401 (H'd S/W - Trigger) & VR502.
3. * Connect an oscilloscope's CH-1 to pin 2 of CN401 for trigger and CH-2 to TP208.
   * Adjust VR502 so that the switching point is positioned 6.5 ± 0.5H from the V-SYNC left edge as shown.


EQUIVALENT PULSE
V SYNC
3H
6.5 ± 0.5H
HEAD SWITCHING POINT

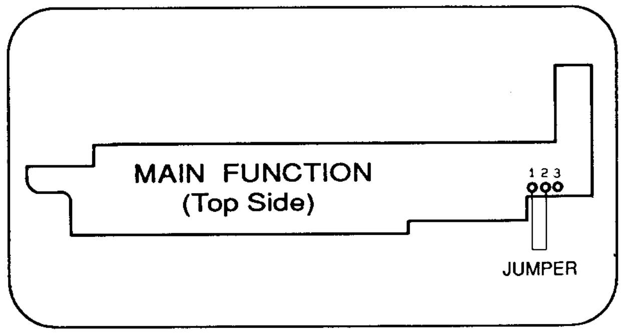

VR501
IC501
VR502
TP208
TP501
CN401
2 1
IC602
IC505
VR601

MAIN PCB (TOP SIDE)

3 STILL POSITION

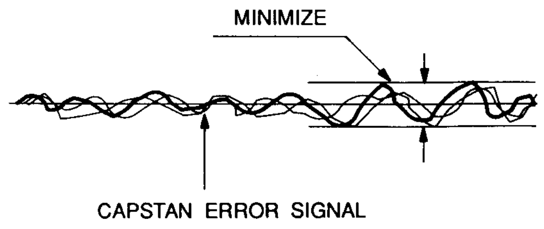
1. "LP Playback with self recording, Camera-input.
2. TV monitor & VR501.
3. * Recording about 5 minutes on LP position with CAMERA mode.
   * Short-circuit hole 1 and hole 2 of Main Function board and play the recorded tape. (See Fig.)
   * Adjust VR501 so as to locate the noise bar to under position on the monitor at still mode.

NOTE : Repeat the adjustment until the noise bar is to be located under position as possible.
(still → adjust → still → adjust → ···)


MAIN FUNCTION
(Top Side)
1 2 3
JUMPER

1 CAPSTAN FG

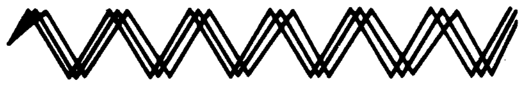
1. "LP-PB", Alignment tape SE2-2L.
2. TP501 & VR601.
3. * Connect an oscilloscope to TP502.
   * Adjust VR601 so as to minimize the width of voltage with LP-PB mode.


MINIMIZE
CAPSTAN ERROR SIGNAL

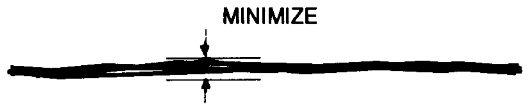
5-6. AUDIO SECTION

3 AFM RECORD MATRIX

1. "REC", Audio 400Hz input signal.
2. TP705 & VR705.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   * Input audio signal generator output 400Hz (-7dBm) signal to audio terminal (L-CH) of A/V JACK.
   * Connect an oscilloscope CH-1 to TP705.
   * Adjust VR705 so as to minimize the waveform.

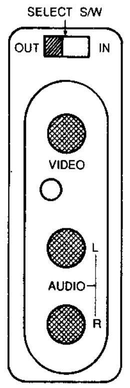


(Before Adjustment)



(After Adjustment)

A/V JACK

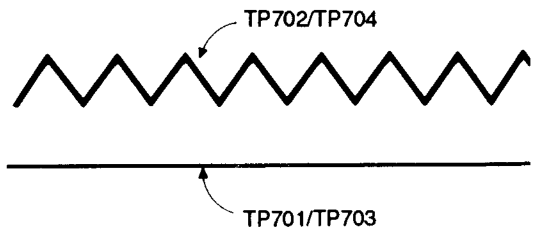


* Only if "Case Right Ass'y" is disassembly, "IN/OUT Select S/W" is showed.

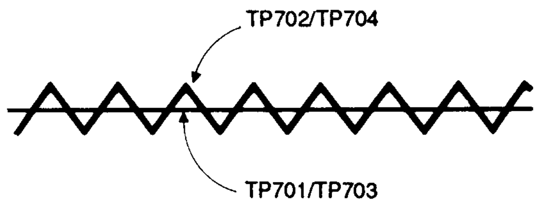
* After finishing the adjustments, be sure to set "IN/OUT select S/W" of A/V JACK to "OUT" and then, perform the assembling process.

1 CARRIER FREQUENCY

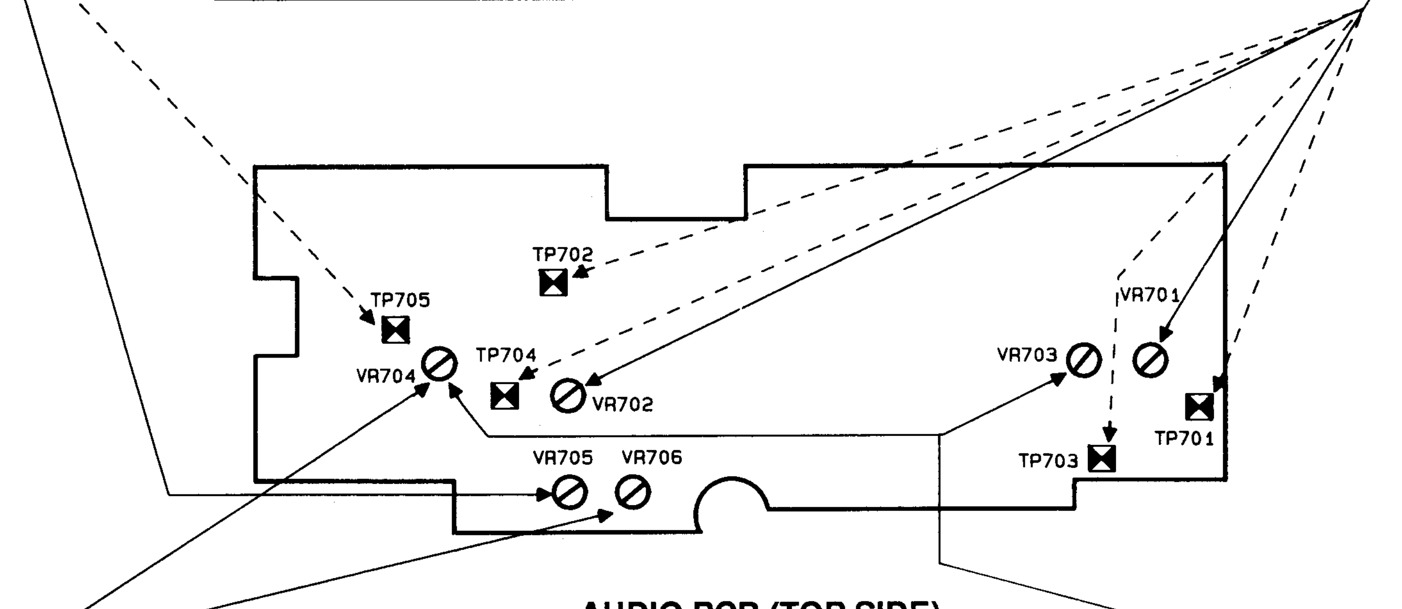
1. "PB", Alignment tape SE2-2S.
2. TP701/TP702 , TP703/TP704 & VR701, VR702.
3. * Connect an oscilloscope's CH-1 to TP701 and CH-2 to TP702.
   * Adjust VR701 so that the signal of TP702 is matched that of TP701 as shown.
   * Connect an oscilloscope's CH-1 to TP703 and CH-2 to TP704.
   * Adjust VR702 so that the signal of TP703 is matched that of TP704 as shown.



(Before Adjustment)



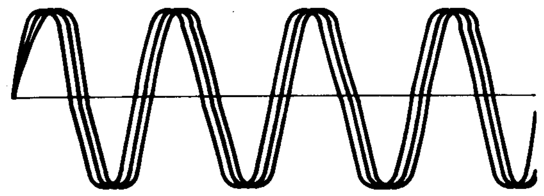
(After Adjustment)



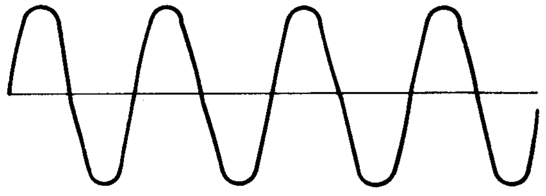
AUDIO PCB (TOP SIDE)

4 STEREO REC/PB MATRIX

1. "REC → PB", Audio 400Hz (L-CH), 1KHz (R-CH) input signal, Alignment tape SE2-2S.
2. Audio terminal L/R of A/V JACK & VR704, VR706.
3. * Set "IN/OUT select S/W" of A/V JACK to "IN".
   * Input audio signal generator output to audio terminal (L-CH) of A/V JACK and record it.
   * Set "IN/OUT select S/W" of A/V JACK to "OUT".
   * Connect an oscilloscope to A/V JACK audio terminal R-CH and playback the recorded tape.
   * Adjust VR706 so that PB waveform isn't shaken as shown below.
   * Playback the alignment tape SE2-2S and adjust VR704 so that the waveform isn't shaken as shown. (This adjustment is performed for the accurate Deviation Adjustment.)



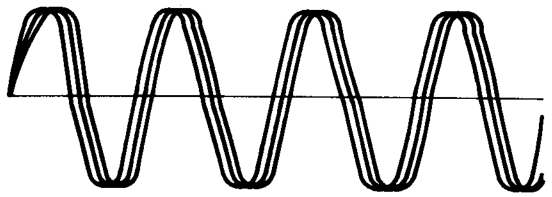
(Before Adjustment)



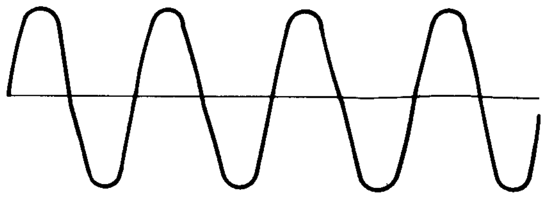
(After Adjustment)

2 DEVIATION

1. "PB", Alignment tape SE2-2/SE2-2S.
2. A/V JACK of Audio terminal & VR703, VR704.
3. * Set "IN/OUT select S/W" of A/V JACK to "OUT".
   * Connect the probe of AC voltmeter to the audio terminal (L-CH) of A/V JACK.
   * Playback the alignment tape SE2-2 and then, Adjust VR703 for -7 ± 0.2dBm.
   * Connect the CH-1 probe of oscilloscope to the audio terminal (R-CH).
   * Playback the alignment tape SE2-2S and then, adjust VR704 so that PB waveform isn't shaken as shown below.

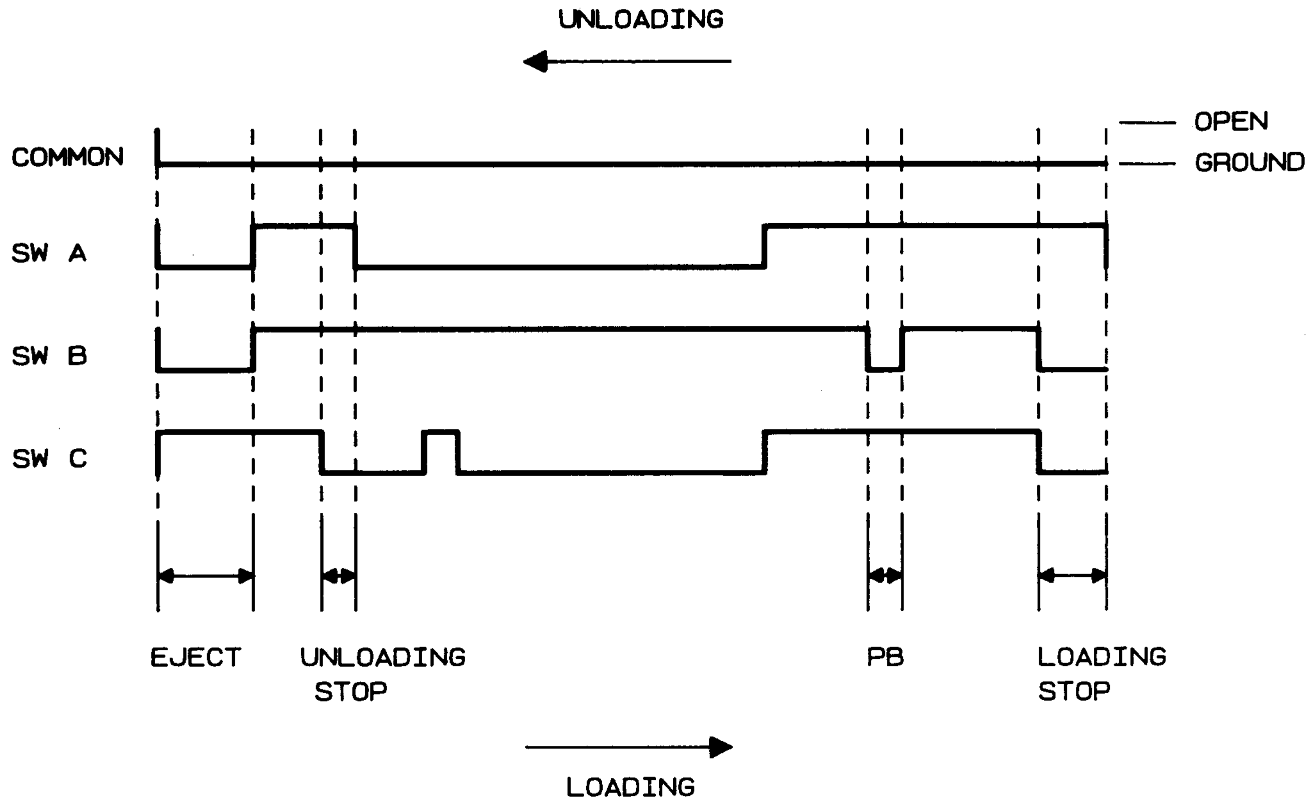


(Before Adjustment)



(After Adjustment)

5-7. PROGRAM SWITCH TIMING CHART



POSITION	SW A	SW B	SW C	MODE
EJECT	L	L	H	EJECT
UNLOADING STOP	H	H	L	UNLOADING STOP
LOADING STOP	H	L	L	LOADING STOP
PB	H	L	H	PLAY, FF, REW, STIIL . . .

6. ELECTRICAL PARTS LIST

6-1. GENERAL INFORMATION

1. Parts Replacement

*Many electrical and mechanical parts in CAMCORDER have special safety-related characteristics.
These characteristics are often not evident fromvisual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual ; electrical components having such features are identified by ⚠ in the replacement parts lists and schematic diagrams.
The use of a replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.*

2. Unless otherwise specified :

1) All resistors are in ohms (Ω)

- K = 1,000
- M = 1,000K

2) All capacitors are in ± 10%, MF = μF.

* CC : PF = uuF, Ceramic, Temp
* CK : PK = uuF, Ceramic, MK
* CS : Tantalium
* CQ : Polyester
* CE : Electrolytic

3) All coils are in microhenry (uH)

- 1mH = 1,000uH

3. ASS'Y = Assembly

4. ⚠ Mark : Safety related parts.

5. How to order replacement parts

To have your order filed promptly and correctly, please furnish the following informations.

1) Model Number
2) Location Number
3) Part Number
4) Description & Specification

6-2. VTR SECTION REPLACEMENT PARTS LIST

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
113	67179-0132-00	UNIT-BATTERY TERMINAL;VP-E807
PS901	64709-600-010	FUSE-MICRO;TR/MCR-1.5 BUSS
PS902	64709-600-010	FUSE-MICRO;TR/MCR-1.5 BUSS
PS903	64709-600-010	FUSE-MICRO;TR/MCR-1.5 BUSS

****

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
212	69063-214-137	ASSY DC/DC CON BOARD;VP-E405 PAL
C901	61619-908-011	C-ELEC.CHIP;UWX1C100 MCR2GB PI3 10U/16V
C902	61617-504-689	C-ELEC OS-CON;16SL 6R8M-K
C903	61619-908-011	C-ELEC.CHIP;UWX1C100 MCR2GB PI3 10U/16V
C904	A1104-0443	C-ELEC;CEAP 10V 33M SE(4X5) BULK
C906	61617-504-689	C-ELEC OS-CON;16SL 6R8M-K
C907	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C908	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C909	61454-154-682	C-CERAMIC CHIP;C1608B1H 682KT
C910	A1100-0030	C-CERAMIC.CHIP;3016B 104K
C911	61617-503-100	C-ELEC OS-CON;10SL 10M-K
C912	A1104-0442	C-ELEC;CEAP 35V 4.7M SE(4X5) BULK
C913	A1104-0442	C-ELEC;CEAP 35V 4.7M SE(4X5) BULK
C914	A1104-0441	C-ELEC;CEAP 25V 6.8M SE(4X5) BULK
C915	61617-505-159	C-ELEC OS-CON;25SL 1R5M-K
C916	A1104-0440	C-ELEC;CEAP 16V 10M SE(4X5) BULK
C917	61617-504-339	C-ELEC OS-CON;16SL 3R3M-K
C918	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C920	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
C921	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C922	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C923	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C924	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C925	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C926	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C927	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C928	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C929	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C930	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C931	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C932	A1104-0443	C-ELEC;CEAP 10V 33M SE(4X5) BULK
C933	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C934	A1104-0443	C-ELEC;CEAP 10V 33M SE(4X5) BULK
C935	61617-503-100	C-ELEC OS-CON;10SL 10M-K
C936	B1106-0149	C-TANTAL.CHIP;TAJA475M010R
C937	A1104-0440	C-ELEC;CEAP 16V 10M SE(4X5) BULK
C938	61453-130-041	C-CERAMIC.CHIP;C3216 Y5V1C 474Z
C939	61453-130-104	C-CERAMIC.CHIP;0805 5E 104ZAT MA
CN901	63349-900-004	CONNECTOR;CGP1705-0101
CN902	B6010-0115	CONNECTOR-WAFER;174634-8
CN903	B6010-0116	CONNECTOR-WAFER;1-174634-7
D901	62169-106-011	DIODE-ZENER.CHIP;RD-12M T1B
D902	62169-901-101	DIODE CHIP;DAN202U(T146)
D903	62169-901-103	DIODE CHIP;IMN10(T108)
D904	62169-106-012	DIODE-SCHOTTKY.CHIP;SB05-05CPTB REEL
D905	62169-106-012	DIODE-SCHOTTKY.CHIP;SB05-05CPTB REEL
D906	62169-106-012	DIODE-SCHOTTKY.CHIP;SB05-05CPTB REEL
D907	62169-102-054	DIODE-SHOTTKY.CHIP;E10QS03-TE12R
D908	62169-901-097	DIODE-CHIP;DA204K (T96)
D909	62169-901-097	DIODE-CHIP;DA204K (T96)
D910	62169-901-077	DIODE.CHIP;MA110-(TX)
IC901	B4008-0969	IC-S/W REGU;TL1455C 5CH DIP
L901	B1130-0027	COIL-CHOKE;1UH-K RA 1-410-337-21 Q5 F100
L902	B1130-0023	COIL-CHOKE;PJ66-100M(10UH)
L903	B1130-0027	COIL-CHOKE;1UH-K RA 1-410-337-21 Q5 F100
L904	B1130-0022	COIL-CHOKE;PF66-220L(22UH)
L906	B1130-0023	COIL-CHOKE;PJ66-100M(10UH)
L907	B1130-0024	COIL-CHOKE;PF66-470L(47UH)
L908	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L909	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L910	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L911	B1160-0009	INDUCTOR-CHIP;NLC322522T-220K
L912	B1130-0024	COIL-CHOKE;PF66-470L(47UH)
L913	B1130-0024	COIL-CHOKE;PF66-470L(47UH)
L914	A1130-0032	COIL-CHOKE;22UH-M RA 8RDB-220M Q30 F1KHZ
L915	B1130-0027	COIL-CHOKE;1UH-K RA 1-410-337-21 Q5 F100
L916	B1160-0013	INDUCTOR-CHIP;NLC322522T-1R0M
Q901	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q902	62129-304-007	TRANSISTOR-CHIP;DTC 124EU(T106)
Q903	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q904	62129-304-007	TRANSISTOR-CHIP;DTC 124EU(T106)
Q905	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q906	62129-301-120	TRANSISTOR.CHIP;2SB 1121(REEL)T-TC
Q907	62129-304-007	TRANSISTOR-CHIP;DTC 124EU(T106)
Q908	62129-301-120	TRANSISTOR.CHIP;2SB 1121(REEL)T-TC
Q909	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q910	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q911	62129-301-120	TRANSISTOR.CHIP;2SB 1121(REEL)T-TC
Q912	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q913	A4050-0098	TR-GENERAL.CHIP;2SB1302 1.3W 5A 320MHZ 25V SI/
Q914	62129-304-014	TRANSISTOR-CHIP;IMB2(T110)
Q915	62129-301-120	TRANSISTOR.CHIP;2SB 1121(REEL)T-TC
Q916	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
R901	61079-918-472	R-CHIP;RH C1608 CS 472-J
R902	61079-918-472	R-CHIP;RH C1608 CS 472-J
R903	61079-918-392	R-CHIP;RH C1608 CS 392-J
R904	61079-918-682	R-CHIP;RH C1608 CS 682-J
R905	61079-918-472	R-CHIP;RH C1608 CS 472-J
R906	61079-918-822	R-CHIP;RH C1608 CS 822-J
R907	61079-918-103	R-CHIP;RH C1608 CS 103-J
R908	61079-918-472	R-CHIP;RH C1608 CS 472-J
R909	61079-918-472	R-CHIP;RH C1608 CS 472-J
R910	61079-918-102	R-CHIP;RH C1608 CS 102-J
R911	61079-918-124	R-CHIP;RH C1608 CS 124-J
R912	61079-918-392	R-CHIP;RH C1608 CS 392-J
R913	61079-918-682	R-CHIP;RH C1608 CS 682-J
R914	61079-918-223	R-CHIP;RH C1608 CS 223-J
R915	61079-918-220	R-CHIP;RH C1608 CS 220-J
R916	61079-918-560	R-CHIP;RH C1608 CS 560-J
R917	61079-918-623	R-CHIP;RH C1608 CS 623-J
R918	61079-918-472	R-CHIP;RH C1608 CS 472-J
R919	61079-918-102	R-CHIP;RH C1608 CS 102-J
R920	61079-918-822	R-CHIP;RH C1608 CS 822-J
R921	61079-918-472	R-CHIP;RH C1608 CS 472-J
R922	61079-918-473	R-CHIP;RH C1608 CS 473-J
R923	61079-918-222	R-CHIP;RH C1608 CS 222-J
R924	61079-917-221	R-CHIP;RH C2012 CS 221-J
R925	61079-918-273	R-CHIP;RH C1608 CS 273-J
R926	61079-918-223	R-CHIP;RH C1608 CS 223-J
R927	61079-918-103	R-CHIP;RH C1608 CS 103-J
R928	61079-918-682	R-CHIP;RH C1608 CS 682-J
R929	61079-918-473	R-CHIP;RH C1608 CS 473-J
R930	61079-918-331	R-CHIP;RH C1608 CS 331-J
R931	61079-918-153	R-CHIP;RH C1608 CS 153-J
R932	61079-918-472	R-CHIP;RH C1608 CS 472-J
R933	61079-918-681	R-CHIP;RH C1608 CS 681-J
R934	61079-918-182	R-CHIP;RH C1608 CS 182-J
R935	61079-918-562	R-CHIP;RH C1608 CS 562-J
R936	61079-918-184	R-CHIP;RH C1608 CS 184-J
R937	61079-918-222	R-CHIP;RH C1608 CS 222-J
R938	61079-918-473	R-CHIP;RH C1608 CS 473-J
R939	61079-918-681	R-CHIP;RH C1608 CS 681-J
R940	61079-918-333	R-CHIP;RH C1608 CS 333-J
R941	61079-918-272	R-CHIP;RH C1608 CS 272-J
R942	61079-918-221	R-CHIP;RH C1608 CS 221-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R943	61079-917-274	R-CHIP;RH C2012 CS 274-J
R944	61079-918-562	R-CHIP;RH C1608 CS 562-J
R945	61079-918-182	R-CHIP;RH C1608 CS 182-J
R947	61079-917-472	R-CHIP;RH C2012 CS 472-J
R948	61079-918-124	R-CHIP;RH C1608 CS 124-J
T901	67189-0025-00	CONVERTER-COIL;101947001A
VR901	61249-922-763	VR-SEMI CHIP;EVM-7JSX30B53
VR902	61249-922-757	VR-SEMI CHIP;EVM-7JSX30B13
VR903	61249-922-771	VR-SEMI CHIP;EVM-7JSX30B52
VR904	A1056-0046	VR-SEMI CHIP;EVM-7JSX30B15

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121	69063-213-479	ASSY-REMOCON MODULE BOARD
C951	61454-144-103	C-CERAMIC.CHIP;1206 5C 103KAT MA
C952	61647-802-470	C-ELEC;CEAP 6.3V 47M SE(2.5)
CN951	63349-603-030	CONNECTOR-WAFER;53015-0310
R951	61079-217-103	R-CHIP;RH C3216 CS 103-J
R952	61079-217-102	R-CHIP;RH C3216 CS 102-J
RM951	67179-0008-00	UNIT-REMOCON;GP1U561

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134	69063-214-070	ASSY REC FUNCTION BOARD
S966	B3018-0025	SW-TACT.CHIP;SKQGAF 6.4X5.2MM WHT 1KEY
S972	B3006-0021	SW-SLIDE;2C2P SH30V ESD10621

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140	69063-213-809	ASSY HEADPHONE BOARD;VP-E405 PAL
C944	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C945	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
CN941	63349-900-002	CONNECTOR-WAFER;CGP1703-0101
J903	63344-010-340	JACK EARPHONE;HSJ1715-01-110(STEREO)
L944	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K
L945	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K
L946	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K

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223	69063-214-069	ASSY ZOOM FUNCTION BOARD

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235	69063-214-067	ASSY MAIN FUNCTION BOARD;VP-E405 PAL
CN961	B6012-0210	CONNECTOR-HOUSING;SD-52402-1490 WHT
R961	61079-918-822	R-CHIP;RH C1608 CS 822-J
R962	61079-918-123	R-CHIP;RH C1608 CS 123-J
R963	61079-918-153	R-CHIP;RH C1608 CS 153-J
R964	61079-918-223	R-CHIP;RH C1608 CS 223-J
R965	61079-918-393	R-CHIP;RH C1608 CS 393-J
R966	61079-918-822	R-CHIP;RH C1608 CS 822-J
R967	61079-918-123	R-CHIP;RH C1608 CS 123-J
R968	61079-918-153	R-CHIP;RH C1608 CS 153-J
R969	61079-918-223	R-CHIP;RH C1608 CS 223-J
R970	61079-918-393	R-CHIP;RH C1608 CS 393-J
S961	63519-105-101	SW-TACT.CHP;SKHMPS066A
S962	63519-105-101	SW-TACT.CHP;SKHMPS066A
S963	63519-105-101	SW-TACT.CHP;SKHMPS066A
S964	63519-105-101	SW-TACT.CHP;SKHMPS066A
S965	63519-105-101	SW-TACT.CHP;SKHMPS066A
S967	B3018-0022	SW-TACT.CHP;SKQGAB 7.4X6MM WHT 1KEY
S968	B3018-0022	SW-TACT.CHP;SKQGAB 7.4X6MM WHT 1KEY
S969	63519-105-101	SW-TACT.CHP;SKHMPS066A
S970	63519-105-101	SW-TACT.CHP;SKHMPS066A

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
S973	63519-103-105	SW-SLIDE;HSW0882-01-020
S974	B3018-0022	SW-TACT.CHP;SKQGAB 7.4X6MM WHT 1KEY

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118	69063-213-808	ASSY MIC BOARD;VP-E405 PAL
C801	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C802	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C803	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C804	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C805	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C806	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C807	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C808	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C809	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C810	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C811	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C812	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C813	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C814	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C815	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C816	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C817	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C818	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C819	61454-243-471	C-ELEC.CHP;ECE-V0JA470P
C820	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C821	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C822	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C823	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C824	61454-155-153	C-CERAMIC CHIP;C1608B1H 153T-K
C825	61454-155-153	C-CERAMIC CHIP;C1608B1H 153T-K
C826	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C827	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C828	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C829	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C830	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C831	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C832	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C833	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C834	61454-154-821	C-CERAMIC CHIP;C1608JB1H 821KT
C835	61454-154-821	C-CERAMIC CHIP;C1608JB1H 821KT
C836	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C837	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C838	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
C839	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
CN801	63349-900-010	CONNECTOR;CGP1604-0101
CN802	63349-900-010	CONNECTOR;CGP1604-0101
CN803	63349-900-003	CONNECTOR;CGP1704-0101
IC801	62119-701-129	IC-FP;LA7470M(TE-L)
J801	63344-010-350	JACK EXTERNAL MIC;HSJ0861-01-410(STEREO)
L801	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K
L802	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K
L803	62429-962-124	INDUCTOR-CHIP;NL322522T 1R0-K
Q801	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q802	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q803	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q804	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q805	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q806	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q807	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q808	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q809	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q810	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
R801	61079-918-222	R-CHIP;RH C1608 CS 222-J
R802	61079-918-222	R-CHIP;RH C1608 CS 222-J
R803	61079-918-154	R-CHIP;RH C1608 CS 154-J
R804	61079-918-154	R-CHIP;RH C1608 CS 154-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R805	61079-918-154	R-CHIP;RH C1608 CS 154-J
R806	61079-918-154	R-CHIP;RH C1608 CS 154-J
R807	61079-918-103	R-CHIP;RH C1608 CS 103-J
R808	61079-918-103	R-CHIP;RH C1608 CS 103-J
R809	61079-918-822	R-CHIP;RH C1608 CS 822-J
R810	61079-918-822	R-CHIP;RH C1608 CS 822-J
R811	61079-918-223	R-CHIP;RH C1608 CS 223-J
R812	61079-918-223	R-CHIP;RH C1608 CS 223-J
R813	61079-918-224	R-CHIP;RH C1608 CS 224-J
R814	61079-918-224	R-CHIP;RH C1608 CS 224-J
R815	61079-918-124	R-CHIP;RH C1608 CS 124-J
R816	61079-918-124	R-CHIP;RH C1608 CS 124-J
R817	61079-918-123	R-CHIP;RH C1608 CS 123-J
R818	61079-918-123	R-CHIP;RH C1608 CS 123-J
R819	61079-918-822	R-CHIP;RH C1608 CS 822-J
R820	61079-918-822	R-CHIP;RH C1608 CS 822-J
R821	61079-918-473	R-CHIP;RH C1608 CS 473-J
R822	61079-918-473	R-CHIP;RH C1608 CS 473-J
R823	61079-918-562	R-CHIP;RH C1608 CS 562-J
R824	61079-918-562	R-CHIP;RH C1608 CS 562-J
R825	61079-918-223	R-CHIP;RH C1608 CS 223-J
R826	61079-918-223	R-CHIP;RH C1608 CS 223-J
R827	61079-918-103	R-CHIP;RH C1608 CS 103-J
R828	61079-918-103	R-CHIP;RH C1608 CS 103-J
R829	61079-918-561	R-CHIP;RH C1608 CS 561-J
R830	61079-918-561	R-CHIP;RH C1608 CS 561-J
R831	61079-918-223	R-CHIP;RH C1608 CS 223-J
R832	61079-918-223	R-CHIP;RH C1608 CS 223-J
R837	61079-918-563	R-CHIP;RH C1608 CS 563-J
R838	61079-918-563	R-CHIP;RH C1608 CS 563-J
R839	61079-918-183	R-CHIP;RH C1608 CS 183-J
R840	61079-918-183	R-CHIP;RH C1608 CS 183-J
R841	61079-918-223	R-CHIP;RH C1608 CS 223-J
R842	61079-918-223	R-CHIP;RH C1608 CS 223-J
R843	61079-918-103	R-CHIP;RH C1608 CS 103-J
R844	61079-918-103	R-CHIP;RH C1608 CS 103-J
R845	61079-918-223	R-CHIP;RH C1608 CS 223-J
R846	61079-918-223	R-CHIP;RH C1608 CS 223-J
R847	61079-918-272	R-CHIP;RH C1608 CS 272-J
R848	61079-918-272	R-CHIP;RH C1608 CS 272-J
R849	61079-217-000	R-CHIP;RH C3216 CS 000-J
R850	61079-217-000	R-CHIP;RH C3216 CS 000-J

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219	69063-213-807	ASSY AUDIO BOARD;VP-E405 PAL
C701	61628-269-020	C-TANTAL.CHIP;TAJA224M035R
C702	61628-269-020	C-TANTAL.CHIP;TAJA224M035R
C703	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C704	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C705	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
C706	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
C707	B1106-0149	C-TANTAL.CHIP;TAJA475M010R
C708	61619-908-479	C-ELEC.CHIP;UWX1C4R7 MCR2GB PI3 4.7U/25V
C709	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C710	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C711	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C712	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C713	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C714	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C715	B1106-0124	C-TANTALUM.CHIP;TAJC476M006R
C716	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C717	B1106-0124	C-TANTALUM.CHIP;TAJC476M006R
C718	61454-243-471	C-ELEC.CHIP;ECE-V0JA470P
C719	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C720	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C721	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C722	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C723	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C724	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C725	61454-153-560	C-CERAMIC CHIP;C1608 CH1H560JT
C726	61454-153-560	C-CERAMIC CHIP;C1608 CH1H560JT
C727	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C728	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C731	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C732	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C733	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C734	61454-157-333	C-CERAMIC CHIP;C1608B1C 333T-K
C735	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C736	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C737	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C738	61619-908-011	C-ELEC.CHIP;UWX1C100 MCR2GB PI3 10U/16V
C739	B1106-0124	C-TANTALUM.CHIP;TAJC476M006R
C740	61454-243-471	C-ELEC.CHIP;ECE-V0JA470P
C741	B1106-0149	C-TANTAL.CHIP;TAJA475M010R
C742	61619-908-479	C-ELEC.CHIP;UWX1C4R7 MCR2GB PI3 4.7U/25V
C743	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C744	61454-243-471	C-ELEC.CHIP;ECE-V0JA470P
C745	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C746	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C747	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C748	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C749	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C750	61619-908-011	C-ELEC.CHIP;UWX1C100 MCR2GB PI3 10U/16V
C751	61619-908-011	C-ELEC.CHIP;UWX1C100 MCR2GB PI3 10U/16V
C752	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C753	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C754	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C755	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C756	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C757	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C758	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C759	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C760	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C761	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C768	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C769	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C770	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C771	61619-906-220	C-ELEC.CHIP;UWX0G220 MCR2GB PI3 22U/4V
C772	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C773	61454-154-472	C-CERAMIC CHIP;C1608JB1H 472KT
C774	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C775	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C776	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C777	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C778	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C779	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
CN701	63349-900-003	CONNECTOR;CGP1704-0101
CN702	63349-900-030	CONNECTOR-WAFER;CGP1603-0101
CN703	B6012-0131	CONNECTOR-HOUSING;4-175635-6 BLK
FL701	64529-632-116	FILTER-CHIP;TH356BTK-K5069YED=P1
FL702	64529-632-115	FILTER-CHIP;TH356BTK-K5068YED=P1
IC701	B4000-0028	IC-ROM;LA7454W QFP
IC702	B4000-0028	IC-ROM;LA7454W QFP
IC703	62119-701-130	IC-FP;LA7456M(TE-F)
IC704	62119-121-062	IC-FP;BU4053BF
Q701	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q703	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q704	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q705	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
R701	61079-918-473	R-CHIP;RH C1608 CS 473-J
R702	61079-918-473	R-CHIP;RH C1608 CS 473-J
R703	61079-918-183	R-CHIP;RH C1608 CS 183-J
R704	61079-918-183	R-CHIP;RH C1608 CS 183-J
R705	61079-918-103	R-CHIP;RH C1608 CS 103-J
R706	61079-918-103	R-CHIP;RH C1608 CS 103-J
R707	61079-918-333	R-CHIP;RH C1608 CS 333-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R708	61079-918-333	R-CHIP;RH C1608 CS 333-J
R709	61079-918-680	R-CHIP;RH C1608 CS 680-J
R710	61079-918-680	R-CHIP;RH C1608 CS 680-J
R711	61079-918-102	R-CHIP;RH C1608 CS 102-J
R712	61079-918-102	R-CHIP;RH C1608 CS 102-J
R713	61079-918-392	R-CHIP;RH C1608 CS 392-J
R714	61079-918-472	R-CHIP;RH C1608 CS 472-J
R715	61079-918-682	R-CHIP;RH C1608 CS 682-J
R716	61079-918-682	R-CHIP;RH C1608 CS 682-J
R717	61079-918-562	R-CHIP;RH C1608 CS 562-J
R718	61079-918-562	R-CHIP;RH C1608 CS 562-J
R719	61079-918-155	R-CHIP;RH C1608 CS 155-J
R720	61079-918-155	R-CHIP;RH C1608 CS 155-J
R721	61079-918-223	R-CHIP;RH C1608 CS 223-J
R722	61079-918-223	R-CHIP;RH C1608 CS 223-J
R723	61079-918-562	R-CHIP;RH C1608 CS 562-J
R724	61079-918-562	R-CHIP;RH C1608 CS 562-J
R726	61079-918-273	R-CHIP;RH C1608 CS 273-J
R727	61079-918-102	R-CHIP;RH C1608 CS 102-J
R728	61079-918-102	R-CHIP;RH C1608 CS 102-J
R729	61079-918-152	R-CHIP;RH C1608 CS 152-J
R732	61079-918-223	R-CHIP;RH C1608 CS 223-J
R733	61079-918-562	R-CHIP;RH C1608 CS 562-J
R734	61079-918-562	R-CHIP;RH C1608 CS 562-J
R735	61079-918-563	R-CHIP;RH C1608 CS 563-J
R736	61079-918-563	R-CHIP;RH C1608 CS 563-J
R737	61079-918-563	R-CHIP;RH C1608 CS 563-J
R738	61079-918-563	R-CHIP;RH C1608 CS 563-J
R739	61079-918-102	R-CHIP;RH C1608 CS 102-J
R740	61079-918-102	R-CHIP;RH C1608 CS 102-J
R741	61079-918-821	R-CHIP;RH C1608 CS 821-J
R742	61079-918-181	R-CHIP;RH C1608 CS 181-J
R743	61079-918-182	R-CHIP;RH C1608 CS 182-J
R744	61079-918-332	R-CHIP;RH C1608 CS 332-J
R745	61079-918-223	R-CHIP;RH C1608 CS 223-J
R746	61079-918-123	R-CHIP;RH C1608 CS 123-J
R747	61079-918-102	R-CHIP;RH C1608 CS 102-J
R749	61079-918-000	R-CHIP;RH C1608 CS 000-J
VR701	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
VR702	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
VR703	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
VR704	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
VR705	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
VR706	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14

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206	69063-213-805	ASSY MAIN BOARD;VP-E405 PAL

SYSTEM CONTROL/SERVO PRATS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C501	B1100-0630	C-CERAMIC.CHIP;GRM40 Y5V 105Z 16
C502	B1106-0193	C-TANTALUM,CHIP;TAJA106M006R
C503	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C504	61454-154-472	C-CERAMIC CHIP;C1608JB1H 472KT
C505	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C508	B1106-0193	C-TANTALUM,CHIP;TAJA106M006R
C509	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C510	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C511	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C512	61454-154-682	C-CERAMIC CHIP;C1608B1H 682KT
C513	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C514	B1102-0156	C-FILM,CHIP;CQS 162 M 16V T 104-J
C515	B1100-0630	C-CERAMIC.CHIP;GRM40 Y5V 105Z 16
C517	61628-309-107	C-TANTAL CHIP;TAJD 107 M 6R3
C518	61453-131-105	C-CERAMIC CHIP;GRM42-6Y5V105Z16 TAPG
C519	61454-153-150	C-CERAMIC CHIP;C1608 CH1H150JT
C520	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C521	61454-153-180	C-CERAMIC CHIP;C1608 CH1H180JT
C522	61454-153-180	C-CERAMIC CHIP;C1608 CH1H180JT
C523	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C524	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C525	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C527	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C528	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
C529	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C533	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C534	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C535	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C536	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C537	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C538	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C539	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C540	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C601	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C602	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C603	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C604	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C605	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C606	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C607	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C608	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C609	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C610	A1100-0046	C-CERAMIC.CHIP;3016F 224Z
C611	A1100-0046	C-CERAMIC.CHIP;3016F 224Z
C612	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C613	B1100-0668	C-CERAMIC,CHIP;GRM42-6X7R224K16PT
C614	B1106-0149	C-TANTAL.CHIP;TAJA475M010R
C616	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
C617	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C618	61454-154-472	C-CERAMIC CHIP;C1608JB1H 472KT
C619	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C620	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C621	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C622	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C623	A1100-0006	C-CERAMIC.CHIP;2012C 561K
C624	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C625	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C626	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C627	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C628	61453-131-152	C-CERAMIC.CHIP;0805 5C 152KAT MA
C630	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C631	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C632	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C633	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C634	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C635	B1106-0193	C-TANTALUM,CHIP;TAJA106M006R
C636	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C637	B1106-0193	C-TANTALUM,CHIP;TAJA106M006R
C638	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C639	61454-155-153	C-CERAMIC CHIP;C1608B1H 153T-K
C640	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C641	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C642	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C643	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C644	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C645	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C646	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C647	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C648	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C649	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C660	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
CN502	B6010-0647	CONNECTOR-WAFER;SD-53280-1490 WHT
CN503	B6012-0123	CONNECTOR-HOUSING;7-174820-7
CN505	B6013-0042	CONNECTOR-FPC;52207-1290 WHT
CN505	B6013-0046	CONNECTOR-FPC;52085-0480 BRN REEL
CN506	63349-900-001	CONNECTOR;CGP1702-0101
CN507	63349-900-001	CONNECTOR;CGP1702-0101

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
CN510	63349-613-100	CONNECTOR-FPC;52085-1080
CN511	B6010-0356	CONNECTOR-FPC;87768-016
D501	62169-901-101	DIODE CHIP;DAN202U(T146)
IC501	67199-0147-00	MICOM;CXP80P724-XXX QFP
IC502	B4008-1038	IC;S-8420BF-T1 SOP
IC504	62119-121-011	IC-FP;NJM2904M(TE3)
IC505	B4008-0869	IC;LB8110M QFP(TP-T1)
IC506	62119-701-074	IC-FP;LB1631MT
IC507	62119-121-011	IC-FP;NJM2904M(TE3)
IC601	62119-701-079	IC-FP;CXA-1204Q
IC602	B4008-0916	IC-DRIVE;TPIC1327DF SOP
IC603	B4008-0870	IC;LB1851M QFP(TP-T1)
L501	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L502	B1160-0009	INDUCTOR-CHIP;NLC322522T-220K
L503	B1160-0009	INDUCTOR-CHIP;NLC322522T-220K
L602	62429-962-331	INDUCTOR-CHIP;NL453232T 331-J
L603	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
PS501	62119-702-004	IC-PROTECTOR;50BV 0.4A ICP-N10/23118132
Q501	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q502	B4050-0100	TRANSISTOR-CHIP;2SB1182TLQ
Q503	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q504	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q601	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q602	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q603	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q604	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q605	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q606	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q607	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
R501	61079-918-332	R-CHIP;RH C1608 CS 332-J
R502	61079-918-103	R-CHIP;RH C1608 CS 103-J
R503	61079-918-102	R-CHIP;RH C1608 CS 102-J
R504	61079-918-103	R-CHIP;RH C1608 CS 103-J
R505	61079-918-104	R-CHIP;RH C1608 CS 104-J
R506	61079-918-471	R-CHIP;RH C1608 CS 471-J
R507	61079-918-102	R-CHIP;RH C1608 CS 102-J
R508	61079-918-473	R-CHIP;RH C1608 CS 473-J
R509	61079-918-105	R-CHIP;RH C1608 CS 105-J
R510	61079-918-104	R-CHIP;RH C1608 CS 104-J
R511	61079-918-104	R-CHIP;RH C1608 CS 104-J
R512	61079-918-473	R-CHIP;RH C1608 CS 473-J
R513	61079-918-105	R-CHIP;RH C1608 CS 105-J
R514	61079-918-104	R-CHIP;RH C1608 CS 104-J
R515	61079-918-104	R-CHIP;RH C1608 CS 104-J
R516	61079-918-473	R-CHIP;RH C1608 CS 473-J
R517	61079-918-473	R-CHIP;RH C1608 CS 473-J
R518	61079-918-474	R-CHIP;RH C1608 CS 474-J
R519	61079-918-105	R-CHIP;RH C1608 CS 105-J
R520	61079-918-333	R-CHIP;RH C1608 CS 333-J
R521	61079-918-394	R-CHIP;RH C1608 CS 394-J
R522	61079-918-273	R-CHIP;RH C1608 CS 273-J
R523	61079-918-105	R-CHIP;RH C1608 CS 105-J
R524	61079-918-333	R-CHIP;RH C1608 CS 333-J
R525	61079-918-682	R-CHIP;RH C1608 CS 682-J
R526	61079-918-332	R-CHIP;RH C1608 CS 332-J
R527	61079-918-103	R-CHIP;RH C1608 CS 103-J
R528	61079-918-103	R-CHIP;RH C1608 CS 103-J
R529	61079-918-103	R-CHIP;RH C1608 CS 103-J
R530	61079-918-102	R-CHIP;RH C1608 CS 102-J
R531	61079-217-681	R-CHIP;RH C3216 CS 681-J
R532	61079-217-681	R-CHIP;RH C3216 CS 681-J
R533	61079-217-681	R-CHIP;RH C3216 CS 681-J
R534	61079-918-103	R-CHIP;RH C1608 CS 103-J
R535	61079-217-101	R-CHIP;RH C3216 CS 101-J
R536	61079-918-473	R-CHIP;RH C1608 CS 473-J
R537	61079-918-473	R-CHIP;RH C1608 CS 473-J
R538	61079-918-123	R-CHIP;RH C1608 CS 123-J
R539	61079-918-123	R-CHIP;RH C1608 CS 123-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R540	61079-918-473	R-CHIP;RH C1608 CS 473-J
R541	61079-918-473	R-CHIP;RH C1608 CS 473-J
R542	61079-918-103	R-CHIP;RH C1608 CS 103-J
R543	61079-918-103	R-CHIP;RH C1608 CS 103-J
R544	61079-918-103	R-CHIP;RH C1608 CS 103-J
R545	61079-918-104	R-CHIP;RH C1608 CS 104-J
R552	61079-918-103	R-CHIP;RH C1608 CS 103-J
R553	61079-918-104	R-CHIP;RH C1608 CS 104-J
R554	61079-918-104	R-CHIP;RH C1608 CS 104-J
R555	61079-918-104	R-CHIP;RH C1608 CS 104-J
R556	61079-918-104	R-CHIP;RH C1608 CS 104-J
R557	61079-918-104	R-CHIP;RH C1608 CS 104-J
R558	61079-918-104	R-CHIP;RH C1608 CS 104-J
R559	61079-918-104	R-CHIP;RH C1608 CS 104-J
R560	61079-918-104	R-CHIP;RH C1608 CS 104-J
R561	61079-918-104	R-CHIP;RH C1608 CS 104-J
R562	61079-918-104	R-CHIP;RH C1608 CS 104-J
R563	61079-918-104	R-CHIP;RH C1608 CS 104-J
R564	61079-918-103	R-CHIP;RH C1608 CS 103-J
R565	61079-918-103	R-CHIP;RH C1608 CS 103-J
R566	61079-918-103	R-CHIP;RH C1608 CS 103-J
R567	61079-918-103	R-CHIP;RH C1608 CS 103-J
R568	61079-918-103	R-CHIP;RH C1608 CS 103-J
R569	61079-918-103	R-CHIP;RH C1608 CS 103-J
R570	61079-918-103	R-CHIP;RH C1608 CS 103-J
R571	61079-918-103	R-CHIP;RH C1608 CS 103-J
R572	61079-918-103	R-CHIP;RH C1608 CS 103-J
R573	61079-918-103	R-CHIP;RH C1608 CS 103-J
R574	61079-918-103	R-CHIP;RH C1608 CS 103-J
R575	61079-918-103	R-CHIP;RH C1608 CS 103-J
R576	61079-918-103	R-CHIP;RH C1608 CS 103-J
R577	61079-918-103	R-CHIP;RH C1608 CS 103-J
R578	61079-918-103	R-CHIP;RH C1608 CS 103-J
R579	61079-918-394	R-CHIP;RH C1608 CS 394-J
R580	61079-918-394	R-CHIP;RH C1608 CS 394-J
R582	61079-918-473	R-CHIP;RH C1608 CS 473-J
R583	61079-918-473	R-CHIP;RH C1608 CS 473-J
R585	61079-918-103	R-CHIP;RH C1608 CS 103-J
R586	61079-918-102	R-CHIP;RH C1608 CS 102-J
R591	61079-918-274	R-CHIP;RH C1608 CS 274-J
R601	61079-918-223	R-CHIP;RH C1608 CS 223-J
R602	61079-918-104	R-CHIP;RH C1608 CS 104-J
R603	61079-918-103	R-CHIP;RH C1608 CS 103-J
R604	61079-918-292	R-CHIP;RH C1608 CS 2R2-J
R605	61079-918-292	R-CHIP;RH C1608 CS 2R2-J
R606	61079-918-292	R-CHIP;RH C1608 CS 2R2-J
R607	61079-918-473	R-CHIP;RH C1608 CS 473-J
R608	61079-918-473	R-CHIP;RH C1608 CS 473-J
R609	61079-918-471	R-CHIP;RH C1608 CS 471-J
R610	61079-918-471	R-CHIP;RH C1608 CS 471-J
R611	61079-918-103	R-CHIP;RH C1608 CS 103-J
R612	61079-918-273	R-CHIP;RH C1608 CS 273-J
R613	61079-918-273	R-CHIP;RH C1608 CS 273-J
R614	61079-918-273	R-CHIP;RH C1608 CS 273-J
R615	61079-917-010	R-CHIP;RH C2012 CS 010-J
R616	61079-917-010	R-CHIP;RH C2012 CS 010-J
R617	61079-917-010	R-CHIP;RH C2012 CS 010-J
R618	61079-917-010	R-CHIP;RH C2012 CS 010-J
R619	61079-918-331	R-CHIP;RH C1608 CS 331-J
R620	61079-918-334	R-CHIP;RH C1608 CS 334-J
R621	61079-918-273	R-CHIP;RH C1608 CS 273-J
R622	61079-918-103	R-CHIP;RH C1608 CS 103-J
R623	61079-918-105	R-CHIP;RH C1608 CS 105-J
R624	61079-918-273	R-CHIP;RH C1608 CS 273-J
R625	61079-918-183	R-CHIP;RH C1608 CS 183-J
R626	61079-918-393	R-CHIP;RH C1608 CS 393-J
R627	61079-918-333	R-CHIP;RH C1608 CS 333-J
R628	61079-918-561	R-CHIP;RH C1608 CS 561-J
R629	61079-918-271	R-CHIP;RH C1608 CS 271-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R630	61079-918-181	R-CHIP;RH C1608 CS 181-J
R631	61079-918-332	R-CHIP;RH C1608 CS 332-J
R632	61079-918-682	R-CHIP;RH C1608 CS 682-J
R633	61079-918-822	R-CHIP;RH C1608 CS 822-J
R634	61079-918-332	R-CHIP;RH C1608 CS 332-J
R635	61079-918-332	R-CHIP;RH C1608 CS 332-J
R636	61079-918-472	R-CHIP;RH C1608 CS 472-J
R637	61079-918-332	R-CHIP;RH C1608 CS 332-J
R638	61079-918-332	R-CHIP;RH C1608 CS 332-J
R639	61079-918-472	R-CHIP;RH C1608 CS 472-J
R640	61079-918-684	R-CHIP;RH C1608 CS 684-J
R641	61079-918-153	R-CHIP;RH C1608 CS 153-J
R642	61079-918-471	R-CHIP;RH C1608 CS 471-J
R643	61079-918-471	R-CHIP;RH C1608 CS 471-J
R644	61079-918-103	R-CHIP;RH C1608 CS 103-J
R645	61079-918-333	R-CHIP;RH C1608 CS 333-J
R646	61079-918-102	R-CHIP;RH C1608 CS 102-J
R647	61079-918-680	R-CHIP;RH C1608 CS 680-J
R648	61079-918-151	R-CHIP;RH C1608 CS 151-J
R649	61079-918-105	R-CHIP;RH C1608 CS 105-J
R650	61079-918-823	R-CHIP;RH C1608 CS 823-J
R651	61079-918-682	R-CHIP;RH C1608 CS 682-J
R652	61079-918-273	R-CHIP;RH C1608 CS 273-J
R653	61079-918-332	R-CHIP;RH C1608 CS 332-J
R654	61079-918-273	R-CHIP;RH C1608 CS 273-J
R655	61079-918-564	R-CHIP;RH C1608 CS 564-J
R656	61079-918-394	R-CHIP;RH C1608 CS 394-J
R657	61079-918-334	R-CHIP;RH C1608 CS 334-J
R658	61079-918-104	R-CHIP;RH C1608 CS 104-J
R659	61079-918-104	R-CHIP;RH C1608 CS 104-J
R660	61079-918-104	R-CHIP;RH C1608 CS 104-J
R661	61079-918-223	R-CHIP;RH C1608 CS 223-J
R662	61079-918-821	R-CHIP;RH C1608 CS 821-J
R663	61079-918-105	R-CHIP;RH C1608 CS 105-J
R664	61079-918-223	R-CHIP;RH C1608 CS 223-J
VR501	61249-922-759	VR-SEMI CHIP;EVM-7JSX30B15
VR502	61249-922-759	VR-SEMI CHIP;EVM-7JSX30B15
VR601	61249-922-772	VR-SEMI CHIP;EVM-7JSX30B55
X501	B1280-0091	CRYSTAL;12MHZ HC-49/U-S 50PPM
X502	64539-021-010	CRYSTAL;P-3(32.768KHZ)
X601	B1280-0080	CRYSTAL;5.859375MHZ HC-49/U-S 50PPM

VIDEO PARTS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C203	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C204	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C205	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C208	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C209	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C210	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C211	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C212	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C213	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C215	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C216	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C217	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C218	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C219	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C220	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C221	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C222	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C223	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C224	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C225	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C230	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C231	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C232	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C233	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C234	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C235	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C236	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C237	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C238	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C239	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C240	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C242	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
C243	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
C244	61454-153-560	C-CERAMIC CHIP;C1608 CH1H560JT
C245	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C246	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C247	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
C248	61454-153-560	C-CERAMIC CHIP;C1608 CH1H560JT
C249	61454-157-473	C-CERAMIC CHIP;C1608JF1C 473ZT
C250	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C251	61454-153-180	C-CERAMIC CHIP;C1608 CH1H180JT
C252	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C253	61454-153-391	C-CERAMIC CHIP;C1608JB1H 391KT
C254	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C255	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C256	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C257	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C258	61454-153-151	C-CERAMIC CHIP;C1608 CH1H151JT
C259	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
C260	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C261	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C270	61454-153-121	C-CERAMIC CHIP;C1608 CH1H121JT
C271	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C272	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C273	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C274	61454-153-050	C-CERAMIC CHIP;C1608 CH1H050CT
C275	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C276	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C277	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C278	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C279	61454-156-273	C-CERAMIC CHIP;C1608JB1C 273KT
C280	B1106-0154	C-TANTALUM,CHIP;TMCMB0J226MTR(7V/22U)
C281	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C282	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
C283	61454-153-680	C-CERAMIC CHIP;C1608 CH1H680JT
C284	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C285	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C302	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C303	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C304	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C305	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C306	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C307	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C308	61454-153-391	C-CERAMIC CHIP;C1608JB1H 391KT
C309	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C310	A1100-0089	C-CERAMIC.CHIP;2012C 030J
C311	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C312	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C313	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C314	B1106-0153	C-TANTALUM,CHIP;CS 7V T10M-M C3216
C315	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C316	61454-252-111	C-CERAMIC.CHIP;0805 5A 111JAT MA
C317	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C318	B1106-0014	C-TANTALUM,CHIP;TAJA225M010R
C319	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C320	61454-153-391	C-CERAMIC CHIP;C1608JB1H 391KT
C321	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C322	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C323	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C324	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C325	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C326	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C327	61454-153-100	C-CERAMIC CHIP;C1608 CH1H100DT
C331	61454-155-223	C-CERAMIC CHIP;C1608 JB1C 223KT
C332	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C333	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C334	61454-159-104	C-CERAMIC CHIP;C1608 F1E 104T-Z
C335	61454-153-820	C-CERAMIC CHIP;C1608 CH1H820JT
C336	61454-154-332	C-CERAMIC CHIP;C1608 B1H 332KT
C338	61454-153-390	C-CERAMIC CHIP;C1608 CH1H390JT
C339	61454-153-150	C-CERAMIC CHIP;C1608 CH1H150JT
C340	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C341	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
C342	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C343	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C344	61454-153-121	C-CERAMIC CHIP;C1608 CH1H121JT
C345	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C347	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C348	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C349	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C351	61454-153-390	C-CERAMIC CHIP;C1608 CH1H390JT
C352	61454-155-223	C-CERAMIC CHIP;C1608 JB1C 223KT
C353	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C354	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C355	61454-153-100	C-CERAMIC CHIP;C1608 CH1H100DT
C356	61454-159-104	C-CERAMIC CHIP;C1608 F1E 104T-Z
C357	61454-155-223	C-CERAMIC CHIP;C1608 JB1C 223KT
C358	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C359	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C360	61454-153-151	C-CERAMIC CHIP;C1608 CH1H151JT
C361	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C362	61454-154-471	C-CERAMIC CHIP;C1608 JB1H 471KT
C370	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C371	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C373	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C374	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C375	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C376	B1106-0020	C-TANTAL.CHIP;TAJA225M016R
C377	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C378	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C380	61454-242-221	C-ELEC.CHIP;ECE-V0GA221P
C381	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C382	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C383	61454-157-473	C-CERAMIC CHIP;C1608 JF1C 473ZT
C384	61453-131-105	C-CERAMIC.CHP;GRM42-6Y5V105Z16 TAPG
C385	B1106-0153	C-TANTALUM.CHIP;CS 7V T10M-M C3216
C386	B1106-0124	C-TANTALUM.CHIP;TAJC476M006R
C387	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C401	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C402	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C403	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C404	B1106-0193	C-TANTALUM.CHIP;TAJA106M006R
C405	61454-154-103	C-CERAMIC CHIP;C1608 B1H 103KT
C406	61454-153-100	C-CERAMIC CHIP;C1608 CH1H100DT
C407	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C408	61454-155-223	C-CERAMIC CHIP;C1608 JB1C 223KT
C409	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C410	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C411	61628-269-040	C-TANTAL CHIP;TAJA105M016R
C412	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C413	61454-153-390	C-CERAMIC CHIP;C1608 CH1H390JT
C414	61454-153-390	C-CERAMIC CHIP;C1608 CH1H390JT
C415	61628-269-221	C-TANTAL.CHIP;TAJC226M006R
CN201	B6013-0044	CONNECTOR-FPC;52085-1180 BRN REEL
CN203	63349-611-110	CONNECTOR-B/B;4-175631-6
CN204	63349-900-003	CONNECTOR;CGP1704-0101
CN401	63349-610-040	CONNECTOR-HOUSING;4-175635-4
CV201	61829-302-701	C-TRIMMER.CHP;TZB04P300BA110T00
D201	62169-901-062	DIODE.CHP;DCC010TA-F
D202	62169-901-093	DIODE.CHP;MA159-(TX)
D203	62169-901-062	DIODE.CHP;DCC010TA-F

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
D205	62169-901-101	DIODE CHIP;DAN202U(T146)
D206	62169-901-101	DIODE CHIP;DAN202U(T146)
D207	62169-901-077	DIODE.CHP;MA110-(TX)
D208	62169-901-062	DIODE.CHP;DCC010TA-F
D401	62169-901-101	DIODE CHIP;DAN202U(T146)
D402	62169-901-101	DIODE CHIP;DAN202U(T146)
D403	62169-901-101	DIODE CHIP;DAN202U(T146)
DL201	62469-030-028	DELAY LINE;ADL-CF2544E
FL201	A1242-0007	FILTER-LC.CHIP;TR A486BCH-K7010=P3 4.49MHZ P
FL202	64529-632-104	FILTER CHIP;TH353TCI-K5059DFES
FL203	64529-632-105	FILTER CHIP;H354BAI-K5060EJD
FL204	64529-310-052	FILTER-CERAMIC;SFE 5.17 MBF
IC201	62119-121-032	IC-FP;CXA1201BQ-T3
IC202	62119-121-015	IC;CXL1502-T1
IC203	62119-121-031	IC-FP;CXA1200BQ
IC204	62119-121-014	IC;CXA1203N-T3
IC205	B4008-1010	IC;MB90077PF-105 SOP
IC206	B4008-1007	IC;BA7046F-T1 SOP
IC207	62119-120-004	IC;MSM 5258MS-K
L201	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L202	B1160-0012	INDUCTOR-CHIP;NLC322522T-470K
L203	B1160-0012	INDUCTOR-CHIP;NLC322522T-470K
L204	62429-962-561	INDUCTOR-CHIP;NL322522T 560-J
L205	62429-962-330	INDUCTOR-CHIP;NL322522T 330-J
L206	62429-962-180	INDUCTOR CHIP;NL322522T 18-J
L207	62429-962-391	INDUCTOR-CHIP;NL322522T 390-J
L208	62429-962-152	INDUCTOR-CHIP;NL322522T 151-J
L211	62429-962-221	INDUCTOR.CHIP;NL322522 220-J
L212	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L213	62429-962-151	INDUCTOR-CHIP;NL322522T 150-J
L301	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
L302	62429-962-102	INDUCTOR-CHIP;NL322522T 101-J
L303	62429-962-152	INDUCTOR-CHIP;NL322522T 151-J
L304	62429-962-331	INDUCTOR-CHIP;NL453232T 331-J
L305	62429-962-102	INDUCTOR-CHIP;NL322522T 101-J
L306	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
L307	62429-962-471	INDUCTOR-CHIP;NL453232T 471-J
L308	62429-962-331	INDUCTOR-CHIP;NL453232T 331-J
L309	62429-962-181	INDUCTOR-CHIP;NL322522T 181-J
L310	62429-962-181	INDUCTOR-CHIP;NL322522T 181-J
L311	62429-962-561	INDUCTOR-CHIP;NL322522T 560-J
L312	62429-962-100	INDUCTOR-CHIP;NL322522T 100-J
L313	62429-962-821	INDUCTOR-CHIP;NL322522T 820-J
L314	62429-962-331	INDUCTOR-CHIP;NL453232T 331-J
L315	62429-962-827	INDUCTOR-CHIP;NL322522T 8R2-K
L320	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
L321	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
L329	62429-962-330	INDUCTOR-CHIP;NL322522T 330-J
L330	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L331	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L401	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
L402	62429-962-561	INDUCTOR-CHIP;NL322522T 560-J
L403	B1160-0010	INDUCTOR-CHIP;NLC322522T-101K
Q201	62129-302-023	TRANSISTOR-CHP;2SA1576-R(T106)
Q202	62129-302-023	TRANSISTOR-CHP;2SA1576-R(T106)
Q203	62129-302-023	TRANSISTOR-CHP;2SA1576-R(T106)
Q204	62129-302-022	TRANSISTOR-CHP;2SC4081-R(T106)
Q205	62129-302-022	TRANSISTOR-CHP;2SC4081-R(T106)
Q206	62129-302-023	TRANSISTOR-CHP;2SA1576-R(T106)
Q207	62129-303-012	TRANSISTOR-CHP;DTC144EU(T106)
Q208	62129-302-022	TRANSISTOR-CHP;2SC4081-R(T106)
Q209	62129-303-011	TRANSISTOR-CHP;DTA144EU(T106)
Q210	62129-301-116	TRANSISTOR.CHP;2SC 3142(REEL)
Q211	62129-302-022	TRANSISTOR-CHP;2SC4081-R(T106)
Q212	62129-303-012	TRANSISTOR-CHP;DTC144EU(T106)
Q213	62129-302-022	TRANSISTOR-CHP;2SC4081-R(T106)
Q214	62129-302-023	TRANSISTOR-CHP;2SA1576-R(T106)
Q215	62129-303-012	TRANSISTOR-CHP;DTC144EU(T106)
Q220	62129-303-012	TRANSISTOR-CHP;DTC144EU(T106)

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
Q221	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q222	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q223	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q224	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q225	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q226	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q227	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q228	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q229	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q230	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q231	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q232	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q233	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q234	62129-302-023	TRANSISTOR-CHIP;2SA1575-R(T106)
Q235	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q236	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q301	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q302	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q303	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q304	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q305	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q306	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q307	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q308	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q309	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q310	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q311	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q312	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q313	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q314	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q315	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q316	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q317	62129-301-115	TRANSISTOR.CHIP;2SB 1119(REEL)T-TC
Q318	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q319	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q320	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q321	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q322	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q323	62129-304-008	TRANSISTOR-CHIP;DTC 114EU(T106)
Q401	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q402	62129-304-008	TRANSISTOR-CHIP;DTC 114EU(T106)
Q403	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
R201	61079-918-273	R-CHIP;RH C1608 CS 273-J
R202	61079-918-223	R-CHIP;RH C1608 CS 223-J
R203	61079-918-390	R-CHIP;RH C1608 CS 390-J
R204	61079-918-390	R-CHIP;RH C1608 CS 390-J
R205	61079-918-104	R-CHIP;RH C1608 CS 104-J
R206	61079-918-339	R-CHIP;RH C1608 CS 3R3-J
R207	61079-918-562	R-CHIP;RH C1608 CS 562-J
R208	61079-918-183	R-CHIP;RH C1608 CS 183-J
R209	61079-918-821	R-CHIP;RH C1608 CS 821-J
R210	61079-918-332	R-CHIP;RH C1608 CS 332-J
R213	61079-918-105	R-CHIP;RH C1608 CS 105-J
R215	61079-918-102	R-CHIP;RH C1608 CS 102-J
R216	61079-918-102	R-CHIP;RH C1608 CS 102-J
R218	61079-918-332	R-CHIP;RH C1608 CS 332-J
R219	61079-918-103	R-CHIP;RH C1608 CS 103-J
R220	61079-918-103	R-CHIP;RH C1608 CS 103-J
R221	61079-918-393	R-CHIP;RH C1608 CS 393-J
R222	61079-918-222	R-CHIP;RH C1608 CS 222-J
R223	61079-918-103	R-CHIP;RH C1608 CS 103-J
R230	61079-918-103	R-CHIP;RH C1608 CS 103-J
R231	61079-918-103	R-CHIP;RH C1608 CS 103-J
R232	61079-918-222	R-CHIP;RH C1608 CS 222-J
R233	61079-918-222	R-CHIP;RH C1608 CS 222-J
R234	61079-918-101	R-CHIP;RH C1608 CS 101-J
R235	61079-918-472	R-CHIP;RH C1608 CS 472-J
R236	61079-918-222	R-CHIP;RH C1608 CS 222-J
R237	61079-918-561	R-CHIP;RH C1608 CS 561-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R238	61079-918-101	R-CHIP;RH C1608 CS 101-J
R239	61079-918-471	R-CHIP;RH C1608 CS 471-J
R240	61079-918-103	R-CHIP;RH C1608 CS 103-J
R241	61079-918-471	R-CHIP;RH C1608 CS 471-J
R242	61079-918-153	R-CHIP;RH C1608 CS 153-J
R243	61079-918-561	R-CHIP;RH C1608 CS 561-J
R244	61079-918-561	R-CHIP;RH C1608 CS 561-J
R245	61079-918-392	R-CHIP;RH C1608 CS 392-J
R248	61079-918-561	R-CHIP;RH C1608 CS 561-J
R249	61079-918-562	R-CHIP;RH C1608 CS 562-J
R250	61079-918-103	R-CHIP;RH C1608 CS 103-J
R251	61079-918-103	R-CHIP;RH C1608 CS 103-J
R252	61079-918-821	R-CHIP;RH C1608 CS 821-J
R253	61079-918-102	R-CHIP;RH C1608 CS 102-J
R254	61079-918-682	R-CHIP;RH C1608 CS 682-J
R255	61079-918-103	R-CHIP;RH C1608 CS 103-J
R256	61079-918-222	R-CHIP;RH C1608 CS 222-J
R257	61079-918-680	R-CHIP;RH C1608 CS 680-J
R258	61079-918-682	R-CHIP;RH C1608 CS 682-J
R259	61079-918-750	R-CHIP;RH C1608 CS 750-J
R260	61079-918-471	R-CHIP;RH C1608 CS 471-J
R261	61079-918-122	R-CHIP;RH C1608 CS 122-J
R262	61079-918-152	R-CHIP;RH C1608 CS 152-J
R263	61079-918-182	R-CHIP;RH C1608 CS 182-J
R264	61079-918-103	R-CHIP;RH C1608 CS 103-J
R265	61079-918-122	R-CHIP;RH C1608 CS 122-J
R266	61079-918-682	R-CHIP;RH C1608 CS 682-J
R267	61079-918-102	R-CHIP;RH C1608 CS 102-J
R268	61079-918-152	R-CHIP;RH C1608 CS 152-J
R269	61079-918-122	R-CHIP;RH C1608 CS 122-J
R270	61079-918-102	R-CHIP;RH C1608 CS 102-J
R271	61079-918-102	R-CHIP;RH C1608 CS 102-J
R272	61079-918-681	R-CHIP;RH C1608 CS 681-J
R273	61079-918-182	R-CHIP;RH C1608 CS 182-J
R274	61079-918-221	R-CHIP;RH C1608 CS 221-J
R275	61079-918-681	R-CHIP;RH C1608 CS 681-J
R276	61079-918-152	R-CHIP;RH C1608 CS 152-J
R280	61079-918-472	R-CHIP;RH C1608 CS 472-J
R281	61079-918-272	R-CHIP;RH C1608 CS 272-J
R282	61079-918-105	R-CHIP;RH C1608 CS 105-J
R283	61079-918-151	R-CHIP;RH C1608 CS 151-J
R284	61079-918-103	R-CHIP;RH C1608 CS 103-J
R285	61079-918-331	R-CHIP;RH C1608 CS 331-J
R286	61079-918-105	R-CHIP;RH C1608 CS 105-J
R287	61079-918-105	R-CHIP;RH C1608 CS 105-J
R288	61079-918-105	R-CHIP;RH C1608 CS 105-J
R289	61079-918-121	R-CHIP;RH C1608 CS 121-J
R290	61079-918-122	R-CHIP;RH C1608 CS 122-J
R291	61079-918-182	R-CHIP;RH C1608 CS 182-J
R292	61079-918-182	R-CHIP;RH C1608 CS 182-J
R299	61079-918-222	R-CHIP;RH C1608 CS 222-J
R300	61079-918-821	R-CHIP;RH C1608 CS 821-J
R301	61079-918-332	R-CHIP;RH C1608 CS 332-J
R302	61079-918-102	R-CHIP;RH C1608 CS 102-J
R303	61079-918-222	R-CHIP;RH C1608 CS 222-J
R304	61079-918-681	R-CHIP;RH C1608 CS 681-J
R305	61079-918-222	R-CHIP;RH C1608 CS 222-J
R306	61079-918-222	R-CHIP;RH C1608 CS 222-J
R307	61079-918-393	R-CHIP;RH C1608 CS 393-J
R308	61079-918-153	R-CHIP;RH C1608 CS 153-J
R309	61079-918-682	R-CHIP;RH C1608 CS 682-J
R310	61079-918-102	R-CHIP;RH C1608 CS 102-J
R311	61079-918-152	R-CHIP;RH C1608 CS 152-J
R312	61079-918-152	R-CHIP;RH C1608 CS 152-J
R313	61079-918-821	R-CHIP;RH C1608 CS 821-J
R314	61079-918-473	R-CHIP;RH C1608 CS 473-J
R315	61079-918-473	R-CHIP;RH C1608 CS 473-J
R316	61079-918-562	R-CHIP;RH C1608 CS 562-J
R317	61079-918-682	R-CHIP;RH C1608 CS 682-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R318	61079-918-822	R-CHIP;RH C1608 CS 822-J
R319	61079-918-681	R-CHIP;RH C1608 CS 681-J
R321	61079-918-474	R-CHIP;RH C1608 CS 474-J
R322	61079-918-821	R-CHIP;RH C1608 CS 821-J
R323	61079-918-103	R-CHIP;RH C1608 CS 103-J
R324	61079-918-222	R-CHIP;RH C1608 CS 222-J
R326	61079-918-821	R-CHIP;RH C1608 CS 821-J
R328	61079-918-222	R-CHIP;RH C1608 CS 222-J
R329	61079-918-222	R-CHIP;RH C1608 CS 222-J
R330	61079-918-102	R-CHIP;RH C1608 CS 102-J
R331	61079-918-105	R-CHIP;RH C1608 CS 105-J
R332	61079-918-221	R-CHIP;RH C1608 CS 221-J
R333	61079-918-822	R-CHIP;RH C1608 CS 822-J
R334	61079-918-272	R-CHIP;RH C1608 CS 272-J
R335	61079-918-102	R-CHIP;RH C1608 CS 102-J
R336	61079-918-471	R-CHIP;RH C1608 CS 471-J
R337	61079-918-152	R-CHIP;RH C1608 CS 152-J
R338	61079-918-332	R-CHIP;RH C1608 CS 332-J
R339	61079-918-472	R-CHIP;RH C1608 CS 472-J
R340	61079-918-102	R-CHIP;RH C1608 CS 102-J
R341	61079-918-103	R-CHIP;RH C1608 CS 103-J
R342	61079-918-272	R-CHIP;RH C1608 CS 272-J
R343	61079-918-122	R-CHIP;RH C1608 CS 122-J
R344	61079-918-102	R-CHIP;RH C1608 CS 102-J
R345	61079-918-000	R-CHIP;RH C1608 CS 000-J
R346	61079-918-103	R-CHIP;RH C1608 CS 103-J
R347	61079-918-103	R-CHIP;RH C1608 CS 103-J
R348	61079-918-102	R-CHIP;RH C1608 CS 102-J
R349	61079-918-222	R-CHIP;RH C1608 CS 222-J
R350	61079-918-561	R-CHIP;RH C1608 CS 561-J
R351	61079-918-121	R-CHIP;RH C1608 CS 121-J
R352	61079-918-102	R-CHIP;RH C1608 CS 102-J
R353	61079-918-332	R-CHIP;RH C1608 CS 332-J
R354	61079-918-273	R-CHIP;RH C1608 CS 273-J
R355	61079-918-103	R-CHIP;RH C1608 CS 103-J
R356	61079-918-683	R-CHIP;RH C1608 CS 683-J
R357	61079-918-684	R-CHIP;RH C1608 CS 684-J
R358	61079-918-122	R-CHIP;RH C1608 CS 122-J
R359	61079-918-472	R-CHIP;RH C1608 CS 472-J
R360	61079-918-183	R-CHIP;RH C1608 CS 183-J
R361	61079-918-472	R-CHIP;RH C1608 CS 472-J
R362	61079-918-333	R-CHIP;RH C1608 CS 333-J
R363	61079-918-153	R-CHIP;RH C1608 CS 153-J
R364	61079-918-821	R-CHIP;RH C1608 CS 821-J
R365	61079-918-331	R-CHIP;RH C1608 CS 331-J
R366	61079-918-103	R-CHIP;RH C1608 CS 103-J
R367	61079-918-821	R-CHIP;RH C1608 CS 821-J
R368	61079-918-331	R-CHIP;RH C1608 CS 331-J
R369	61079-918-561	R-CHIP;RH C1608 CS 561-J
R370	61079-918-332	R-CHIP;RH C1608 CS 332-J
R371	61079-918-121	R-CHIP;RH C1608 CS 121-J
R372	61079-918-471	R-CHIP;RH C1608 CS 471-J
R373	61079-918-333	R-CHIP;RH C1608 CS 333-J
R374	61079-918-223	R-CHIP;RH C1608 CS 223-J
R375	61079-918-102	R-CHIP;RH C1608 CS 102-J
R376	61079-918-102	R-CHIP;RH C1608 CS 102-J
R377	61079-918-153	R-CHIP;RH C1608 CS 153-J
R378	61079-918-471	R-CHIP;RH C1608 CS 471-J
R379	61079-918-221	R-CHIP;RH C1608 CS 221-J
R380	61079-918-222	R-CHIP;RH C1608 CS 222-J
R381	61079-918-562	R-CHIP;RH C1608 CS 562-J
R382	61079-918-471	R-CHIP;RH C1608 CS 471-J
R383	61079-918-331	R-CHIP;RH C1608 CS 331-J
R384	61079-918-821	R-CHIP;RH C1608 CS 821-J
R385	61079-918-471	R-CHIP;RH C1608 CS 471-J
R386	61079-918-272	R-CHIP;RH C1608 CS 272-J
R387	61079-918-102	R-CHIP;RH C1608 CS 102-J
R388	61079-918-103	R-CHIP;RH C1608 CS 103-J
R389	61079-918-272	R-CHIP;RH C1608 CS 272-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R390	61079-918-152	R-CHIP;RH C1608 CS 152-J
R391	61079-918-103	R-CHIP;RH C1608 CS 103-J
R392	61079-918-102	R-CHIP;RH C1608 CS 102-J
R393	61079-918-822	R-CHIP;RH C1608 CS 822-J
R394	61079-918-472	R-CHIP;RH C1608 CS 472-J
R395	61079-918-332	R-CHIP;RH C1608 CS 332-J
R396	61079-918-104	R-CHIP;RH C1608 CS 104-J
R397	61079-918-472	R-CHIP;RH C1608 CS 472-J
R398	61079-918-472	R-CHIP;RH C1608 CS 472-J
R399	61079-918-102	R-CHIP;RH C1608 CS 102-J
R400	61079-918-102	R-CHIP;RH C1608 CS 102-J
R401	61079-918-104	R-CHIP;RH C1608 CS 104-J
R402	61079-918-104	R-CHIP;RH C1608 CS 104-J
R403	61079-918-104	R-CHIP;RH C1608 CS 104-J
R404	61079-918-222	R-CHIP;RH C1608 CS 222-J
R405	61079-918-104	R-CHIP;RH C1608 CS 104-J
R406	61079-918-272	R-CHIP;RH C1608 CS 272-J
R411	61079-918-103	R-CHIP;RH C1608 CS 103-J
R412	61079-918-103	R-CHIP;RH C1608 CS 103-J
R413	61079-918-103	R-CHIP;RH C1608 CS 103-J
R414	61079-918-222	R-CHIP;RH C1608 CS 222-J
R415	61079-918-103	R-CHIP;RH C1608 CS 103-J
R416	61079-918-474	R-CHIP;RH C1608 CS 474-J
R417	61079-918-474	R-CHIP;RH C1608 CS 474-J
R418	61079-917-134	R-CHIP;RH C2012 CS 134-J
R421	61079-918-473	R-CHIP;RH C1608 CS 473-J
R422	61079-918-103	R-CHIP;RH C1608 CS 103-J
R423	61079-918-222	R-CHIP;RH C1608 CS 222-J
R424	61079-918-103	R-CHIP;RH C1608 CS 103-J
R425	61079-918-222	R-CHIP;RH C1608 CS 222-J
R426	61079-918-182	R-CHIP;RH C1608 CS 182-J
R427	61079-918-153	R-CHIP;RH C1608 CS 153-J
R428	61079-918-333	R-CHIP;RH C1608 CS 333-J
R429	61079-918-182	R-CHIP;RH C1608 CS 182-J
R430	61079-918-332	R-CHIP;RH C1608 CS 332-J
R431	61079-918-750	R-CHIP;RH C1608 CS 750-J
R432	61079-918-562	R-CHIP;RH C1608 CS 562-J
R433	61079-918-391	R-CHIP;RH C1608 CS 391-J
R434	61079-918-471	R-CHIP;RH C1608 CS 471-J
R435	61079-918-471	R-CHIP;RH C1608 CS 471-J
R436	61079-918-103	R-CHIP;RH C1608 CS 103-J
R437	61079-918-103	R-CHIP;RH C1608 CS 103-J
R438	61079-918-103	R-CHIP;RH C1608 CS 103-J
R439	61079-918-561	R-CHIP;RH C1608 CS 561-J
R440	61079-918-471	R-CHIP;RH C1608 CS 471-J
VR201	61249-922-767	VR-SEMI.CHIP;EVM-7JSX30BE3
VR202	61249-922-771	VR-SEMI CHIP;EVM-7JSX30B52
VR203	61249-922-757	VR-SEMI CHIP;EVM-7JSX30B13
VR204	61249-922-767	VR-SEMI.CHIP;EVM-7JSX30BE3
VR205	61249-922-763	VR-SEMI CHIP;EVM-7JSX30B53
VR206	61249-922-767	VR-SEMI.CHIP;EVM-7JSX30BE3
VR207	61249-922-758	VR-SEMI CHIP;EVM-7JSX30B14
VR208	61249-922-769	VR-SEMI CHIP;EVM-7JSX30B54
VR209	61249-922-763	VR-SEMI CHIP;EVM-7JSX30B53
VR210	61249-922-758	VR-SEMI CHIP;EVM-7JSX30B14
VR211	61249-922-769	VR-SEMI CHIP;EVM-7JSX30B54
X201	B1280-0077	CRYSTAL;4.433619MHZ HC-49/U-S 20PPM
X401	B1280-0076	CRYSTAL;3.579545MHZ HC-49/U-S 20PPM

PRE-AMP PARTS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C101	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C102	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C103	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C104	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C105	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C106	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C107	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C108	61454-153-181	C-CERAMIC CHIP;C1608 CH1H181JT
C109	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C110	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C111	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C112	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C113	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C114	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C115	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C116	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C117	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C118	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C119	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C123	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C124	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C125	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C126	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C131	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C132	61454-153-151	C-CERAMIC CHIP;C1608 CH1H151JT
C133	61454-153-820	C-CERAMIC CHIP;C1608 CH1H820JT
C134	61454-153-101	C-CERAMIC CHIP;C1608 CH1H101JT
C135	A1100-0017	C-CERAMIC.CHIP;2012F 104Z
C136	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C138	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C139	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C140	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C141	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C145	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C148	61454-154-681	C-CERAMIC CHIP;C1608B1H 681KT
C149	61453-130-474	C-CERAMIC.CHIP;0805 5C 473MAT 050M
C160	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C161	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C162	61454-154-471	C-CERAMIC CHIP;C1608JB1H 471KT
C163	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C165	B1106-0154	C-TANTALUM.CHIP;TMCMB0J226MTR(7V/22U)
C166	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
CN101	66049-0014-00	FPC-CONNECTOR;PPC T0.33 VN-E405
IC101	62119-121-033	IC-FP;CXA1202R-T3
L101	62429-962-100	INDUCTOR-CHIP;NL322522T 100-J
L102	B1160-0008	INDUCTOR-CHIP;NLC322522T-221K
L103	B1160-0011	INDUCTOR-CHIP;NLC322522T-100K
L104	B1160-0008	INDUCTOR-CHIP;NLC322522T-221K
L105	B1160-0008	INDUCTOR-CHIP;NLC322522T-221K
L106	B1160-0008	INDUCTOR-CHIP;NLC322522T-221K
L107	B1160-0008	INDUCTOR-CHIP;NLC322522T-221K
Q102	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q108	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q109	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q110	62129-302-022	TRANSISTOR-CHIP;2SC4081-R(T106)
Q111	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q112	62129-301-121	TRANSISTOR.CHIP;2SA 1037K-QRS(T96)
Q113	62129-302-023	TRANSISTOR-CHIP;2SA1576-R(T106)
Q114	62129-303-012	TRANSISTOR-CHIP;DTC144EU(T106)
Q116	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
Q117	62129-303-011	TRANSISTOR-CHIP;DTA144EU(T106)
R102	61079-918-154	R-CHIP;RH C1608 CS 154-J
R103	61079-918-471	R-CHIP;RH C1608 CS 471-J
R104	61079-918-473	R-CHIP;RH C1608 CS 473-J
R106	61079-918-152	R-CHIP;RH C1608 CS 152-J
R110	61079-918-223	R-CHIP;RH C1608 CS 223-J
R113	61079-918-392	R-CHIP;RH C1608 CS 392-J
R114	61079-918-273	R-CHIP;RH C1608 CS 273-J
R115	61079-918-223	R-CHIP;RH C1608 CS 223-J
R116	61079-918-333	R-CHIP;RH C1608 CS 333-J
R117	61079-918-333	R-CHIP;RH C1608 CS 333-J
R118	61079-918-223	R-CHIP;RH C1608 CS 223-J
R119	61079-918-273	R-CHIP;RH C1608 CS 273-J
R120	61079-918-333	R-CHIP;RH C1608 CS 333-J
R121	61079-918-153	R-CHIP;RH C1608 CS 153-J
R122	61079-918-122	R-CHIP;RH C1608 CS 122-J
R123	61079-918-223	R-CHIP;RH C1608 CS 223-J
R124	61079-918-330	R-CHIP;RH C1608 CS 330-J
R125	61079-918-223	R-CHIP;RH C1608 CS 223-J
R126	61079-918-152	R-CHIP;RH C1608 CS 152-J
R127	61079-918-271	R-CHIP;RH C1608 CS 271-J
R128	61079-918-821	R-CHIP;RH C1608 CS 821-J
R129	61079-918-473	R-CHIP;RH C1608 CS 473-J
R130	61079-918-223	R-CHIP;RH C1608 CS 223-J
R131	61079-918-822	R-CHIP;RH C1608 CS 822-J
R132	61079-918-103	R-CHIP;RH C1608 CS 103-J
R133	61079-918-560	R-CHIP;RH C1608 CS 560-J
R134	61079-918-271	R-CHIP;RH C1608 CS 271-J
R135	61079-918-221	R-CHIP;RH C1608 CS 221-J
R136	61079-918-223	R-CHIP;RH C1608 CS 223-J
R137	61079-918-223	R-CHIP;RH C1608 CS 223-J
R139	61079-918-561	R-CHIP;RH C1608 CS 561-J
R140	61079-918-471	R-CHIP;RH C1608 CS 471-J
R141	61079-918-104	R-CHIP;RH C1608 CS 104-J
R143	61079-918-823	R-CHIP;RH C1608 CS 823-J
R151	61079-918-154	R-CHIP;RH C1608 CS 154-J
R152	61079-918-330	R-CHIP;RH C1608 CS 330-J
R155	61079-918-272	R-CHIP;RH C1608 CS 272-J
R156	61079-918-471	R-CHIP;RH C1608 CS 471-J
R157	61079-918-333	R-CHIP;RH C1608 CS 333-J
R161	61079-918-330	R-CHIP;RH C1608 CS 330-J
R665	61079-918-332	R-CHIP;RH C1608 CS 332-J
R666	61079-918-271	R-CHIP;RH C1608 CS 271-J
VR101	61249-922-769	VR-SEMI CHIP;EVM-7JSX30B54
VR102	61249-922-769	VR-SEMI CHIP;EVM-7JSX30B54

6-3. CAMERA SECTION REPLACEMENT PARTS LIST

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
122	69063-213-837	ASSY CAM MAIN BOARD;VP-E405 PAL

DRIVE PARTS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C101	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C103	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C105	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C106	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C107	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C108	61454-153-471	C-CERAMIC CHIP;C1608 CH1H471JT
C109	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C112	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C114	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C116	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C117	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C118	61454-153-150	C-CERAMIC CHIP;C1608 CH1H150JT
C119	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C120	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C122	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C123	61628-319-105	C-TANTAL.CHIP;TAJB 105M 035
C124	B1106-0096	C-TANTALUM,CHIP;TAJC475M025R
C125	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C126	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C127	B1106-0029	C-TANTALUM,CHIP;TAJC106M020R
C129	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C130	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C131	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C132	61628-319-105	C-TANTAL.CHIP;TAJB 105M 035
C133	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C136	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C137	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C138	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C139	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C140	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C141	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C142	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C143	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C144	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C145	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C146	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C147	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C148	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C149	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C150	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C151	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C152	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C153	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C156	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C157	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C158	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C159	61454-154-222	C-CERAMIC CHIP;1608 B1H 222KT
C160	61454-158-473	C-CERAMIC CHIP;C1608JB1C 473KT
C161	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C162	B1100-0630	C-CERAMIC,CHIP;GRM40 Y5V 105Z 16
C163	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C165	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
CN101	B6010-0084	CONNECTOR-WAFER;4-175635-4
D103	62169-901-077	DIODE.CHIP;MA110-(TX)
D104	62169-901-077	DIODE.CHIP;MA110-(TX)
D105	62169-901-031	DIODE.CHIP;MA121-(TX)
D106	62169-901-030	DIODE.CHIP;MA141WK-(TX)
IC101	B4004-0039	IC-LOGIC;TC6070AU QFP
IC102	B4004-0040	IC-LOGIC;TC74AC04FN SOP
IC104	62119-701-105	IC-FP;CXA1390R/AR-T3
IC105	62119-701-134	IC-FP;KS7220-REEL
L101	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L102	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L103	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L105	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
L107	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L108	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
L109	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
Q101	62129-301-067	TRANSISTOR.CHIP;2SC 4168-3-TB
Q102	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q103	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q104	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q105	B4050-0088	TR-GENERAL,CHIP;IMZ1 300MW 100MA 50MHZ 50V S
Q106	B4050-0067	TR-GENERAL,CHIP;IMT1 1MA 5MA 20KHZ 5V SI/PNP
Q107	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
R101	61079-918-102	R-CHIP;RH C1608 CS 102-J
R102	61079-918-333	R-CHIP;RH C1608 CS 333-J
R103	61079-918-102	R-CHIP;RH C1608 CS 102-J
R104	61079-918-473	R-CHIP;RH C1608 CS 473-J
R105	61079-918-101	R-CHIP;RH C1608 CS 101-J
R106	61079-918-101	R-CHIP;RH C1608 CS 101-J
R109	61079-918-101	R-CHIP;RH C1608 CS 101-J
R110	61079-918-103	R-CHIP;RH C1608 CS 103-J
R111	61079-918-102	R-CHIP;RH C1608 CS 102-J
R112	61079-918-101	R-CHIP;RH C1608 CS 101-J
R113	61079-918-103	R-CHIP;RH C1608 CS 103-J
R114	61079-918-103	R-CHIP;RH C1608 CS 103-J
R115	61079-917-475	R-CHIP;RH C2012 CS 475-J
R117	61079-918-222	R-CHIP;RH C1608 CS 222-J
R119	61079-918-222	R-CHIP;RH C1608 CS 222-J
R120	61079-918-272	R-CHIP;RH C1608 CS 272-J
R121	61079-918-103	R-CHIP;RH C1608 CS 103-J
R122	61079-918-101	R-CHIP;RH C1608 CS 101-J
R123	61079-918-101	R-CHIP;RH C1608 CS 101-J
R124	61079-918-103	R-CHIP;RH C1608 CS 103-J
R125	61079-918-471	R-CHIP;RH C1608 CS 471-J
R126	61079-918-100	R-CHIP;RH C1608 CS 100-J
R127	61079-918-100	R-CHIP;RH C1608 CS 100-J
R128	61079-918-101	R-CHIP;RH C1608 CS 101-J
R130	61079-918-102	R-CHIP;RH C1608 CS 102-J
R131	61079-918-683	R-CHIP;RH C1608 CS 683-J
R136	61079-918-393	R-CHIP;RH C1608 CS 393-J
R137	61079-918-223	R-CHIP;RH C1608 CS 223-J
R138	61079-918-103	R-CHIP;RH C1608 CS 103-J
R139	61079-918-333	R-CHIP;RH C1608 CS 333-J
R140	61079-918-223	R-CHIP;RH C1608 CS 223-J
R141	61079-918-223	R-CHIP;RH C1608 CS 223-J
R142	61079-918-223	R-CHIP;RH C1608 CS 223-J
R143	61079-918-473	R-CHIP;RH C1608 CS 473-J
R144	61079-918-183	R-CHIP;RH C1608 CS 183-J
R145	61079-918-333	R-CHIP;RH C1608 CS 333-J
R146	61079-918-103	R-CHIP;RH C1608 CS 103-J
R147	61079-918-393	R-CHIP;RH C1608 CS 393-J
R148	61079-918-822	R-CHIP;RH C1608 CS 822-J
R149	61079-918-223	R-CHIP;RH C1608 CS 223-J
R150	61079-918-472	R-CHIP;RH C1608 CS 472-J
R151	61079-918-222	R-CHIP;RH C1608 CS 222-J
R152	61079-918-272	R-CHIP;RH C1608 CS 272-J
R153	61079-918-272	R-CHIP;RH C1608 CS 272-J
R154	61079-918-272	R-CHIP;RH C1608 CS 272-J
R156	61079-918-101	R-CHIP;RH C1608 CS 101-J
R157	61079-918-101	R-CHIP;RH C1608 CS 101-J
R158	61079-918-272	R-CHIP;RH C1608 CS 272-J
R160	61079-918-103	R-CHIP;RH C1608 CS 103-J
R166	61079-918-000	R-CHIP;RH C1608 CS 000-J
R167	61079-918-184	R-CHIP;RH C1608 CS 184-J
R168	61079-918-223	R-CHIP;RH C1608 CS 223-J
R169	61079-918-103	R-CHIP;RH C1608 CS 103-J
R170	61079-918-472	R-CHIP;RH C1608 CS 472-J
R171	61079-918-821	R-CHIP;RH C1608 CS 821-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R172	61079-918-472	R-CHIP;RH C1608 CS 472-J
R173	61079-918-153	R-CHIP;RH C1608 CS 153-J
R174	61079-918-472	R-CHIP;RH C1608 CS 472-J
R175	61079-918-223	R-CHIP;RH C1608 CS 223-J
R176	61079-918-105	R-CHIP;RH C1608 CS 105-J
R177	61079-918-103	R-CHIP;RH C1608 CS 103-J
R178	61079-918-393	R-CHIP;RH C1608 CS 393-J
R179	61079-918-103	R-CHIP;RH C1608 CS 103-J
R180	61079-918-103	R-CHIP;RH C1608 CS 103-J
R183	61079-918-000	R-CHIP;RH C1608 CS 000-J
VR101	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR102	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14
X101	B1280-0051	CRYSTAL;19.3125MHZ JX0-3 5PPM

PROCESS PARTS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C2001	B1106-0008	C-TANTALUM.CHIP;TAJA335M006R
C2003	61454-153-150	C-CERAMIC CHIP;C1608 CH1H150JT
C2004	B1106-0017	C-TANTALUM.CHIP;TAJC226M010R
C201	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C202	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C203	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C204	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C205	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C207	B1106-0017	C-TANTALUM.CHIP;TAJC226M010R
C208	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C209	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C210	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C211	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C212	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C213	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C214	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C217	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C218	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C219	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C220	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C221	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C222	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C223	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C224	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C225	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C226	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C227	61454-153-100	C-CERAMIC CHIP;C1608 CH1H100DT
C228	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C229	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C230	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C231	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C232	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C233	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C234	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C235	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C236	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C237	61454-153-100	C-CERAMIC CHIP;C1608 CH1H100DT
C238	B1106-0010	C-TANTALUM.CHIP;TAJB106M006R
C239	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C240	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C241	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C242	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C243	B1106-0025	C-TANTALUM.CHIP;TAJA105M020R
C244	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C245	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C246	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C247	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C248	61628-309-107	C-TANTAL.CHIP;TAJD 107 M 6R3
C249	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C250	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C252	61454-153-270	C-CERAMIC CHIP;C1608 CH1H270JT
C254	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C255	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
C257	61454-153-220	C-CERAMIC CHIP;C1608 CH1H220JT
C258	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C259	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C260	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C262	B1106-0017	C-TANTALUM.CHIP;TAJC226M010R
C263	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C264	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C265	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C266	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C267	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C268	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C269	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C270	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C271	B1100-0630	C-CERAMIC.CHIP;GRM40 Y5V 105Z 16
C273	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C274	B1100-0630	C-CERAMIC.CHIP;GRM40 Y5V 105Z 16
C275	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C277	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C278	61454-153-270	C-CERAMIC CHIP;C1608 CH1H270JT
C279	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C280	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C281	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C282	B1100-0630	C-CERAMIC.CHIP;GRM40 Y5V 105Z 16
C283	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C284	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C285	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C286	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C288	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C289	B1106-0017	C-TANTALUM.CHIP;TAJC226M010R
C290	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C291	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C293	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C294	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C297	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C298	B1106-0017	C-TANTALUM.CHIP;TAJC226M010R
C299	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
CT201	61829-302-701	C-TRIMMER.CHIP;TZB04P300BA110T00
D201	62169-901-077	DIODE.CHIP;MA110-(TX)
D202	62169-901-068	DIODE.CHIP;MA341-(TX)
FL201	64529-001-007	LC FILTER.CHIP;TH356LSM-K5041UND=P1
FL202	64529-632-109	LC FILTER.CHIP;TH354LAI-K5054DDG=PI 4MHZ LPF
FL203	64529-419-050	FILTER LC(LPF);H356LSK-4259WID=P
FL204	64529-419-040	LC FILTER.CHIP(DELAY);G355ENK-1979LAD=P
IC201	B4012-0076	IC-LINER;MN3861SA SOP (E2)
IC202	B4012-0167	IC-LINEAR;MSM7417MS-KR4 QFP
IC203	62119-701-106	IC-FP;CXA1391R-T5
IC204	B4008-0979	IC;MN73033XRA QFP
IC205	62119-701-107	IC-FP;CXA1392R-T3
L201	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L203	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L204	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L205	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L206	62429-961-474	INDUCTOR-CHIP;LQH3N 470-K
L209	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L210	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L212	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
Q201	62129-301-067	TRANSISTOR.CHIP;2SC 4168-3-TB
Q202	62129-303-006	TRANSISTOR-CHIP;IMX1
Q203	A4050-0104	TR-GENERAL.CHIP;2SA 1179
Q206	A4050-0104	TR-GENERAL.CHIP;2SA 1179
Q207	A4050-0104	TR-GENERAL.CHIP;2SA 1179
Q208	62129-303-006	TRANSISTOR-CHIP;IMX1
Q209	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q210	62129-301-067	TRANSISTOR.CHIP;2SC 4168-3-TB
Q211	A4050-0104	TR-GENERAL.CHIP;2SA 1179
Q212	62129-301-067	TRANSISTOR.CHIP;2SC 4168-3-TB
Q213	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q214	62139-601-656	FET;2SK 209 TE85L
Q215	A4050-0104	TR-GENERAL.CHIP;2SA 1179

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
Q216	B4050-0088	TR-GENERAL,CHIP;IMZ1 300MW 100MA 50MHZ 50V
Q217	B4050-0088	TR-GENERAL,CHIP;IMZ1 300MW 100MA 50MHZ 50V
Q218	62129-303-006	TRANSISTOR-CHIP;IMX1
Q219	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q220	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q222	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q226	A4050-0104	TR-GENERAL,CHIP;2SA 1179
R2004	61079-918-222	R-CHIP;RH C1608 CS 222-J
R2005	61079-918-103	R-CHIP;RH C1608 CS 103-J
R2006	61079-918-102	R-CHIP;RH C1608 CS 102-J
R2007	61079-918-333	R-CHIP;RH C1608 CS 333-J
R2008	61079-918-393	R-CHIP;RH C1608 CS 393-J
R2009	61079-918-472	R-CHIP;RH C1608 CS 472-J
R201	61079-918-183	R-CHIP;RH C1608 CS 183-J
R2010	61079-918-472	R-CHIP;RH C1608 CS 472-J
R2011	61079-918-221	R-CHIP;RH C1608 CS 221-J
R2012	61079-918-101	R-CHIP;RH C1608 CS 101-J
R2013	61079-918-102	R-CHIP;RH C1608 CS 102-J
R2015	61079-918-822	R-CHIP;RH C1608 CS 822-J
R2016	61079-918-153	R-CHIP;RH C1608 CS 153-J
R2017	61079-918-822	R-CHIP;RH C1608 CS 822-J
R2018	61079-918-102	R-CHIP;RH C1608 CS 102-J
R2019	61079-918-103	R-CHIP;RH C1608 CS 103-J
R202	61079-918-333	R-CHIP;RH C1608 CS 333-J
R2020	61079-918-392	R-CHIP;RH C1608 CS 392-J
R2021	61079-918-272	R-CHIP;RH C1608 CS 272-J
R2022	61079-918-222	R-CHIP;RH C1608 CS 222-J
R2026	61079-918-102	R-CHIP;RH C1608 CS 102-J
R2029	61079-918-000	R-CHIP;RH C1608 CS 000-J
R203	61079-918-103	R-CHIP;RH C1608 CS 103-J
R2030	61079-918-000	R-CHIP;RH C1608 CS 000-J
R2032	61079-918-222	R-CHIP;RH C1608 CS 222-J
R2033	61079-918-331	R-CHIP;RH C1608 CS 331-J
R2034	61079-918-331	R-CHIP;RH C1608 CS 331-J
R204	61079-918-103	R-CHIP;RH C1608 CS 103-J
R2042	61079-918-122	R-CHIP;RH C1608 CS 122-J
R2043	61079-918-682	R-CHIP;RH C1608 CS 682-J
R2044	61079-918-101	R-CHIP;RH C1608 CS 101-J
R206	61079-918-102	R-CHIP;RH C1608 CS 102-J
R207	61079-918-102	R-CHIP;RH C1608 CS 102-J
R210	61079-918-103	R-CHIP;RH C1608 CS 103-J
R211	61079-918-102	R-CHIP;RH C1608 CS 102-J
R212	61079-918-392	R-CHIP;RH C1608 CS 392-J
R213	61079-918-332	R-CHIP;RH C1608 CS 332-J
R214	61079-918-102	R-CHIP;RH C1608 CS 102-J
R216	61079-918-102	R-CHIP;RH C1608 CS 102-J
R218	61079-918-153	R-CHIP;RH C1608 CS 153-J
R219	61079-918-303	R-CHIP;RH C1608 CS 303-J
R220	61079-918-273	R-CHIP;RH C1608 CS 273-J
R222	61079-918-151	R-CHIP;RH C1608 CS 151-J
R223	61079-918-151	R-CHIP;RH C1608 CS 151-J
R224	61079-918-103	R-CHIP;RH C1608 CS 103-J
R225	61079-918-103	R-CHIP;RH C1608 CS 103-J
R226	61079-918-151	R-CHIP;RH C1608 CS 151-J
R227	61079-918-103	R-CHIP;RH C1608 CS 103-J
R228	61079-918-103	R-CHIP;RH C1608 CS 103-J
R229	61079-918-331	R-CHIP;RH C1608 CS 331-J
R230	61079-918-102	R-CHIP;RH C1608 CS 102-J
R231	61079-918-472	R-CHIP;RH C1608 CS 472-J
R232	61079-918-472	R-CHIP;RH C1608 CS 472-J
R233	61079-918-102	R-CHIP;RH C1608 CS 102-J
R234	61079-918-103	R-CHIP;RH C1608 CS 103-J
R235	61079-918-102	R-CHIP;RH C1608 CS 102-J
R236	61079-918-182	R-CHIP;RH C1608 CS 182-J
R237	61079-918-102	R-CHIP;RH C1608 CS 102-J
R238	61079-918-102	R-CHIP;RH C1608 CS 102-J
R239	61079-918-182	R-CHIP;RH C1608 CS 182-J
R240	61079-918-102	R-CHIP;RH C1608 CS 102-J
R241	61079-918-472	R-CHIP;RH C1608 CS 472-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R242	61079-918-472	R-CHIP;RH C1608 CS 472-J
R243	61079-918-472	R-CHIP;RH C1608 CS 472-J
R244	61079-918-221	R-CHIP;RH C1608 CS 221-J
R245	61079-918-103	R-CHIP;RH C1608 CS 103-J
R246	61079-918-332	R-CHIP;RH C1608 CS 332-J
R247	61079-918-333	R-CHIP;RH C1608 CS 333-J
R248	61079-918-333	R-CHIP;RH C1608 CS 333-J
R249	61079-918-472	R-CHIP;RH C1608 CS 472-J
R250	61079-918-471	R-CHIP;RH C1608 CS 471-J
R254	61079-918-102	R-CHIP;RH C1608 CS 102-J
R255	61079-918-102	R-CHIP;RH C1608 CS 102-J
R256	61079-918-102	R-CHIP;RH C1608 CS 102-J
R257	61079-918-102	R-CHIP;RH C1608 CS 102-J
R259	61079-918-102	R-CHIP;RH C1608 CS 102-J
R260	61079-918-223	R-CHIP;RH C1608 CS 223-J
R261	61079-918-152	R-CHIP;RH C1608 CS 152-J
R262	61079-918-123	R-CHIP;RH C1608 CS 123-J
R263	61079-918-332	R-CHIP;RH C1608 CS 332-J
R264	61079-918-102	R-CHIP;RH C1608 CS 102-J
R265	61079-918-223	R-CHIP;RH C1608 CS 223-J
R266	61079-918-152	R-CHIP;RH C1608 CS 152-J
R267	61079-918-222	R-CHIP;RH C1608 CS 222-J
R268	61079-918-102	R-CHIP;RH C1608 CS 102-J
R269	61079-918-123	R-CHIP;RH C1608 CS 123-J
R270	61079-918-102	R-CHIP;RH C1608 CS 102-J
R271	61079-918-102	R-CHIP;RH C1608 CS 102-J
R272	61079-918-563	R-CHIP;RH C1608 CS 563-J
R273	61079-918-104	R-CHIP;RH C1608 CS 104-J
R274	61079-918-471	R-CHIP;RH C1608 CS 471-J
R275	61079-918-332	R-CHIP;RH C1608 CS 332-J
R276	61079-918-333	R-CHIP;RH C1608 CS 333-J
R277	61079-918-123	R-CHIP;RH C1608 CS 123-J
R278	61079-918-103	R-CHIP;RH C1608 CS 103-J
R280	61079-918-102	R-CHIP;RH C1608 CS 102-J
R281	61079-918-222	R-CHIP;RH C1608 CS 222-J
R283	61079-918-123	R-CHIP;RH C1608 CS 123-J
R284	61079-918-333	R-CHIP;RH C1608 CS 333-J
R285	61079-918-183	R-CHIP;RH C1608 CS 183-J
R287	61079-918-102	R-CHIP;RH C1608 CS 102-J
R288	61079-918-102	R-CHIP;RH C1608 CS 102-J
R289	61079-918-221	R-CHIP;RH C1608 CS 221-J
R290	61079-918-471	R-CHIP;RH C1608 CS 471-J
R291	61079-918-332	R-CHIP;RH C1608 CS 332-J
R293	61079-918-472	R-CHIP;RH C1608 CS 472-J
R294	61079-918-103	R-CHIP;RH C1608 CS 103-J
R295	61079-918-223	R-CHIP;RH C1608 CS 223-J
R296	61079-918-333	R-CHIP;RH C1608 CS 333-J
R297	61079-918-332	R-CHIP;RH C1608 CS 332-J
R298	61079-918-333	R-CHIP;RH C1608 CS 333-J
R299	61079-918-153	R-CHIP;RH C1608 CS 153-J
VR201	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR202	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR203	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR204	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR205	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR206	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR207	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR208	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR209	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR210	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR211	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR212	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
VR213	61249-924-001	VR-SEMI CHIP;EVM-1XSX50B13
VR214	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54
X201	64539-012-534	CRYSTAL;HC-49/U-S(17.735)

AUTO FOCUS PARTS

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
B301	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B302	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B303	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B304	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B305	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B306	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
B307	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
C301	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C302	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C303	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C305	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C307	61454-153-150	C-CERAMIC CHIP;C1608 CH1H150JT
C308	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C309	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C310	61454-158-473	C-CERAMIC CHIP;C1608JB1C 473KT
C311	B1106-0008	C-TANTALUM,CHIP;TAJA335M006R
C312	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C313	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C314	61454-153-271	C-CERAMIC CHIP;C1608 CH1H271JT
C315	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C316	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C317	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C318	61454-158-473	C-CERAMIC CHIP;C1608JB1C 473KT
C319	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C321	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C322	B1106-0008	C-TANTALUM,CHIP;TAJA335M006R
C323	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C324	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C325	B1106-0008	C-TANTALUM,CHIP;TAJA335M006R
C326	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C327	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C328	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C329	61628-309-107	C-TANTAL.CHIP;TAJD 107 M 6R3
C330	61628-309-107	C-TANTAL.CHIP;TAJD 107 M 6R3
C331	B1106-0025	C-TANTALUM,CHIP;TAJA105M020R
C332	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C333	61628-269-040	C-TANTAL.CHIP;TAJA105M016R
C334	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C335	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C336	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C337	B1106-0008	C-TANTALUM,CHIP;TAJA335M006R
C338	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C340	61454-154-332	C-CERAMIC CHIP;C1608B1H 332KT
C341	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C342	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C343	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C344	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C345	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C346	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C347	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C348	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C349	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C350	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C351	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C352	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C353	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C354	B1106-0096	C-TANTALUM,CHIP;TAJC475M025R
C355	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C356	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C358	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C359	61454-153-470	C-CERAMIC CHIP;C1608 CH1H470JT
C360	B1106-0010	C-TANTALUM,CHIP;TAJB106M006R
C361	61454-154-102	C-CERAMIC CHIP;C1608B1H 102KT
C362	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
CN301	B6010-0085	CONNECTOR-WAFER;3-175634-8
CN302	B6010-0125	CONNECTOR-WAFER;5-175635-2
CN303	B6010-0083	CONNECTOR-WAFER;5-175635-0
CN305	B6010-0083	CONNECTOR-WAFER;5-175635-0
D301	62169-901-030	DIODE.CHIP;MA141WK-(TX)
D302	62169-901-031	DIODE.CHIP;MA121-(TX)
FL301	A1242-0003	FILTER-LC,CHIP;LP H486LSK-K7001=P1 21M
IC301	B4014-0008	IC;MSM6219MS SOP-R1
IC302	A4006-0002	IC;SF6401 QFP
IC303	B4002-0054	IC-MCU;UPD78214GC-483-AB8 QFP
IC304	62119-701-086	IC-FP;NJU 74HC 4066M(TE2)
IC305	B4004-0041	IC-LOGIC;TB6504F SOP
IC306	B4008-0783	IC-DRIVE;LB1830 SOP
IC307	62119-402-030	IC-FP;NJM3414M(TE3)
IC308	B4000-0029	IC-EEPROM;X24C00 SOP
IC309	A4008-1020	IC;TK11450MTL SOP
L302	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
L303	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L304	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
L305	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
L306	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L307	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L308	62429-961-103	INDUCTOR-CHIP;LQH3N 101-K
Q301	B4050-0067	TR-GENERAL,CHIP;IMT1 1MA 5MA 20KHZ 5V SI/PNP
Q302	62129-303-006	TRANSISTOR-CHIP;IMX1
Q303	62129-303-006	TRANSISTOR-CHIP;IMX1
Q304	62129-303-006	TRANSISTOR-CHIP;IMX1
Q305	62129-303-006	TRANSISTOR-CHIP;IMX1
Q306	62129-303-006	TRANSISTOR-CHIP;IMX1
Q307	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q308	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q309	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q310	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q311	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q312	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q313	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q314	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q315	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q316	62129-301-071	TRANSISTOR.CHIP;DTC 144WK(TF96)
Q317	B4050-0088	TR-GENERAL,CHIP;IMZ1 300MW 100MA 50MHZ 50V S
Q318	62129-301-067	TRANSISTOR.CHIP;2SC 4168-3-TB
Q320	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q321	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
R301	61079-918-222	R-CHIP;RH C1608 CS 222-J
R3010	61079-918-472	R-CHIP;RH C1608 CS 472-J
R3011	61079-918-472	R-CHIP;RH C1608 CS 472-J
R3014	61079-918-104	R-CHIP;RH C1608 CS 104-J
R3015	61079-918-102	R-CHIP;RH C1608 CS 102-J
R3016	61079-918-103	R-CHIP;RH C1608 CS 103-J
R3017	61079-918-000	R-CHIP;RH C1608 CS 000-J
R3018	61079-918-433	R-CHIP;RH C1608 CS 433-J
R3019	61079-918-103	R-CHIP;RH C1608 CS 103-J
R302	61079-918-512	R-CHIP;RH C1608 CS 512-J
R3020	61079-918-000	R-CHIP;RH C1608 CS 000-J
R3021	61079-918-103	R-CHIP;RH C1608 CS 103-J
R3022	61079-918-333	R-CHIP;RH C1608 CS 333-J
R3023	61079-918-303	R-CHIP;RH C1608 CS 303-J
R3024	61079-918-471	R-CHIP;RH C1608 CS 471-J
R3025	61079-918-000	R-CHIP;RH C1608 CS 000-J
R3026	61079-918-000	R-CHIP;RH C1608 CS 000-J
R3028	61079-918-332	R-CHIP;RH C1608 CS 332-J
R303	61079-918-103	R-CHIP;RH C1608 CS 103-J
R3030	61079-918-102	R-CHIP;RH C1608 CS 102-J
R304	61079-917-000	R-CHIP;RH C2012 CS 000-J
R305	61079-918-271	R-CHIP;RH C1608 CS 271-J
R306	61079-918-272	R-CHIP;RH C1608 CS 272-J
R307	61079-918-471	R-CHIP;RH C1608 CS 471-J
R308	61079-918-222	R-CHIP;RH C1608 CS 222-J
R309	61079-918-561	R-CHIP;RH C1608 CS 561-J
R310	61079-918-222	R-CHIP;RH C1608 CS 222-J
R311	61079-918-561	R-CHIP;RH C1608 CS 561-J
R312	61079-918-561	R-CHIP;RH C1608 CS 561-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R313	61079-918-272	R-CHIP;RH C1608 CS 272-J
R314	61079-918-102	R-CHIP;RH C1608 CS 102-J
R315	61079-918-102	R-CHIP;RH C1608 CS 102-J
R316	61079-918-271	R-CHIP;RH C1608 CS 271-J
R317	61079-918-271	R-CHIP;RH C1608 CS 271-J
R318	61079-918-471	R-CHIP;RH C1608 CS 471-J
R319	61079-918-561	R-CHIP;RH C1608 CS 561-J
R320	61079-918-272	R-CHIP;RH C1608 CS 272-J
R321	61079-918-222	R-CHIP;RH C1608 CS 222-J
R322	61079-918-561	R-CHIP;RH C1608 CS 561-J
R323	61079-918-222	R-CHIP;RH C1608 CS 222-J
R324	61079-918-561	R-CHIP;RH C1608 CS 561-J
R325	61079-918-471	R-CHIP;RH C1608 CS 471-J
R326	61079-918-222	R-CHIP;RH C1608 CS 222-J
R327	61079-918-561	R-CHIP;RH C1608 CS 561-J
R328	61079-918-222	R-CHIP;RH C1608 CS 222-J
R329	61079-918-561	R-CHIP;RH C1608 CS 561-J
R330	61079-918-332	R-CHIP;RH C1608 CS 332-J
R331	61079-918-332	R-CHIP;RH C1608 CS 332-J
R332	61079-918-472	R-CHIP;RH C1608 CS 472-J
R333	61079-918-472	R-CHIP;RH C1608 CS 472-J
R334	61079-918-102	R-CHIP;RH C1608 CS 102-J
R335	61079-918-333	R-CHIP;RH C1608 CS 333-J
R336	61079-918-223	R-CHIP;RH C1608 CS 223-J
R337	61079-918-153	R-CHIP;RH C1608 CS 153-J
R338	61079-918-333	R-CHIP;RH C1608 CS 333-J
R339	61079-918-473	R-CHIP;RH C1608 CS 473-J
R340	61079-918-123	R-CHIP;RH C1608 CS 123-J
R341	A1020-0569	R-CHIP;RH 1/10 CS 7R5-J C2012 RMC 1/10 7.5-J
R342	A1020-0569	R-CHIP;RH 1/10 CS 7R5-J C2012 RMC 1/10 7.5-J
R343	61079-918-104	R-CHIP;RH C1608 CS 104-J
R344	61079-918-104	R-CHIP;RH C1608 CS 104-J
R345	61079-918-682	R-CHIP;RH C1608 CS 682-J
R346	61079-918-332	R-CHIP;RH C1608 CS 332-J
R347	61079-918-683	R-CHIP;RH C1608 CS 683-J
R348	61079-918-474	R-CHIP;RH C1608 CS 474-J
R349	61079-918-682	R-CHIP;RH C1608 CS 682-J
R350	61079-918-332	R-CHIP;RH C1608 CS 332-J
R351	61079-918-683	R-CHIP;RH C1608 CS 683-J
R352	61079-918-474	R-CHIP;RH C1608 CS 474-J
R353	61079-918-223	R-CHIP;RH C1608 CS 223-J
R354	61079-918-102	R-CHIP;RH C1608 CS 102-J
R355	61079-918-473	R-CHIP;RH C1608 CS 473-J
R356	61079-918-472	R-CHIP;RH C1608 CS 472-J
R357	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R358	61079-918-103	R-CHIP;RH C1608 CS 103-J
R359	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R360	61079-918-103	R-CHIP;RH C1608 CS 103-J
R361	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R362	61079-918-103	R-CHIP;RH C1608 CS 103-J
R363	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R364	61079-918-103	R-CHIP;RH C1608 CS 103-J
R365	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R366	61079-918-103	R-CHIP;RH C1608 CS 103-J
R367	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R368	61079-918-223	R-CHIP;RH C1608 CS 223-J
R369	61079-918-563	R-CHIP;RH C1608 CS 563-J
R370	61079-918-472	R-CHIP;RH C1608 CS 472-J
R371	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R372	61079-918-103	R-CHIP;RH C1608 CS 103-J
R373	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R374	61079-918-103	R-CHIP;RH C1608 CS 103-J
R375	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R376	A1020-0430	R-CHIP;RMC 1/16 CS 203-J C1608 RMC 1/16 20K-J
R377	61079-918-104	R-CHIP;RH C1608 CS 104-J
R378	61079-918-332	R-CHIP;RH C1608 CS 332-J
R379	61079-918-103	R-CHIP;RH C1608 CS 103-J
R380	61079-918-102	R-CHIP;RH C1608 CS 102-J
R381	61079-918-472	R-CHIP;RH C1608 CS 472-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R382	61079-918-472	R-CHIP;RH C1608 CS 472-J
R383	61079-918-272	R-CHIP;RH C1608 CS 272-J
R384	61079-918-272	R-CHIP;RH C1608 CS 272-J
R385	61079-918-104	R-CHIP;RH C1608 CS 104-J
R386	61079-918-103	R-CHIP;RH C1608 CS 103-J
R387	61079-918-224	R-CHIP;RH C1608 CS 224-J
R388	61079-918-224	R-CHIP;RH C1608 CS 224-J
R390	61079-918-102	R-CHIP;RH C1608 CS 102-J
R391	61079-918-104	R-CHIP;RH C1608 CS 104-J
R392	61079-918-104	R-CHIP;RH C1608 CS 104-J
R393	61079-918-104	R-CHIP;RH C1608 CS 104-J
R394	61079-918-334	R-CHIP;RH C1608 CS 334-J
R395	61079-918-222	R-CHIP;RH C1608 CS 222-J
R396	61079-918-102	R-CHIP;RH C1608 CS 102-J
R397	61079-918-473	R-CHIP;RH C1608 CS 473-J
R398	61079-918-472	R-CHIP;RH C1608 CS 472-J
R399	61079-918-104	R-CHIP;RH C1608 CS 104-J
VR301	61249-924-003	VR-SEMI CHIP;EVM-1XSX50B15
VR302	61249-924-001	VR-SEMI CHIP;EVM-1XSX50B13
X301	62429-014-130	COIL OSC;JXO-3(14.31818MHZ)

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123	69063-213-839	ASSY S/IMPOSE BOARD;VP-E405 PAL
B601	62429-014-337	CHIP-FERRITE BEAD;HF50ACB322513-T
C601	61454-153-820	C-CERAMIC CHIP;C1608 CH1H820JT
C602	61454-153-221	C-CERAMIC CHIP;C1608 CH1H221JT
C603	61454-153-120	C-CERAMIC CHIP;C1608 CH1H120JT
C604	61454-153-330	C-CERAMIC CHIP;C1608 CH1H330JT
C605	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C606	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C607	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C608	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C610	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C611	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C612	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C613	B1106-0010	C-TANTALUM,CHIP;TAJB106M006R
C614	B1106-0010	C-TANTALUM,CHIP;TAJB106M006R
C615	B1106-0017	C-TANTALUM,CHIP;TAJC226M010R
C616	61628-319-105	C-TANTAL.CHIP;TAJB 105M 035
C617	61454-154-103	C-CERAMIC CHIP;C1608B1H 103KT
C618	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C621	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C622	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C623	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C624	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C625	B1106-0010	C-TANTALUM,CHIP;TAJB106M006R
CN601	B6012-0188	CONNECTOR-HOUSING;5-175630-0 BLK
CN602	B6012-0120	CONNECTOR-HOUSING;4-175631-2 WHT
IC601	62119-701-094	IC-FP;TC74HC132AF(EL)
IC602	62119-701-133	IC-FP;KM6264BLG-10L(REEL)
IC603	62119-701-093	IC-FP;SSI5002Q
IC605	62119-701-112	IC-FP;CXA1393AM-T6
L601	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L602	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L603	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L604	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
L605	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
Q601	62129-301-117	TRANSISTOR.CHIP;2SC 2812(REEL)L6-TA
Q602	62129-301-074	TRANSISTOR.CHIP;DTC 124TK(TF96)
R601	61079-918-102	R-CHIP;RH C1608 CS 102-J
R602	61079-918-102	R-CHIP;RH C1608 CS 102-J
R603	61079-918-102	R-CHIP;RH C1608 CS 102-J
R604	61079-918-182	R-CHIP;RH C1608 CS 182-J
R605	61079-918-103	R-CHIP;RH C1608 CS 103-J
R606	61079-918-103	R-CHIP;RH C1608 CS 103-J
R607	61079-918-103	R-CHIP;RH C1608 CS 103-J
R608	61079-918-103	R-CHIP;RH C1608 CS 103-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R610	61079-918-103	R-CHIP;RH C1608 CS 103-J
R611	61079-918-102	R-CHIP;RH C1608 CS 102-J
R612	61079-918-103	R-CHIP;RH C1608 CS 103-J
R613	61079-918-103	R-CHIP;RH C1608 CS 103-J
R614	61079-918-103	R-CHIP;RH C1608 CS 103-J
R615	61079-918-102	R-CHIP;RH C1608 CS 102-J
R616	61079-918-102	R-CHIP;RH C1608 CS 102-J
R618	61079-918-102	R-CHIP;RH C1608 CS 102-J
R619	61079-918-102	R-CHIP;RH C1608 CS 102-J
R620	61079-918-102	R-CHIP;RH C1608 CS 102-J
R621	61079-918-103	R-CHIP;RH C1608 CS 103-J
R622	61079-918-103	R-CHIP;RH C1608 CS 103-J
R624	61079-918-000	R-CHIP;RH C1608 CS 000-J
R625	61079-918-000	R-CHIP;RH C1608 CS 000-J
R626	61079-918-000	R-CHIP;RH C1608 CS 000-J
R627	61079-918-102	R-CHIP;RH C1608 CS 102-J
R630	61079-918-223	R-CHIP;RH C1608 CS 223-J
R633	61079-918-000	R-CHIP;RH C1608 CS 000-J
R634	61079-918-000	R-CHIP;RH C1608 CS 000-J
R635	61079-918-183	R-CHIP;RH C1608 CS 183-J
R636	61079-918-223	R-CHIP;RH C1608 CS 223-J
R638	61079-918-102	R-CHIP;RH C1608 CS 102-J
R639	61079-918-000	R-CHIP;RH C1608 CS 000-J
R640	61079-918-000	R-CHIP;RH C1608 CS 000-J
R641	61079-918-102	R-CHIP;RH C1608 CS 102-J
R642	61079-918-102	R-CHIP;RH C1608 CS 102-J
R643	61079-918-102	R-CHIP;RH C1608 CS 102-J
R644	61079-918-000	R-CHIP;RH C1608 CS 000-J
R645	61079-918-102	R-CHIP;RH C1608 CS 102-J
R646	61079-918-102	R-CHIP;RH C1608 CS 102-J
R647	61079-918-000	R-CHIP;RH C1608 CS 000-J
R648	61079-918-104	R-CHIP;RH C1608 CS 104-J
VR601	61249-924-001	VR-SEMI CHIP;EVM-1XSX50B13
VR602	61249-924-007	VR-SEMI CHIP;EVM-1XSX50B54

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126	69063-213-840	ASSY CCD BOARD;VP-E405 PAL
C001	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C002	B1106-0096	C-TANTALUM,CHIP;TAJC475M025R
C003	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C004	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
CN001	B6012-0061	CONNECTOR-HOUSING;4-175631-4
L001	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
Q001	62139-601-657	FET;2SK 300-3(T7)
R001	61079-918-101	R-CHIP;RH C1608 CS 101-J
R002	61079-918-392	R-CHIP;RH C1608 CS 392-J
R003	61079-918-105	R-CHIP;RH C1608 CS 105-J
IC001	B4014-0007	IC-CCD;TCD5251D DIP

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127	69063-213-838	ASSY LENS DRIVE BOARD;VP-E405
C407	B1100-0630	C-CERAMIC,CHIP;GRM40 Y5V 105Z 16
C408	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C409	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C410	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C413	B1106-0029	C-TANTALUM,CHIP;TAJC106M020R
C414	B1106-0029	C-TANTALUM,CHIP;TAJC106M020R
C415	61628-269-090	C-TANTAL,CHIP;TAJB475M010R
C416	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C417	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C418	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C419	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
CN402	B6010-0082	CONNECTOR-WAFER;4-175635-2
CN403	B6010-0336	CONNECTOR-WAFER;87768-020 WHT

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
CN404	B6012-0062	CONNECTOR-HOUSING;5-175631-0
IC402	62119-402-030	IC-FP;NJM3414M(TE3)
IC404	62119-402-030	IC-FP;NJM3414M(TE3)
L402	62429-961-224	INDUCTOR-CHIP;LQH3N 220-K
Q402	A4050-0104	TR-GENERAL,CHIP;2SA 1179
Q403	62129-301-071	TRANSISTOR,CHIP;DTC 144WK(TF96)
Q405	B4050-0088	TR-GENERAL,CHIP;IMZ1 300MW 100MA 50MHZ 50V S
Q406	62129-303-006	TRANSISTOR-CHIP;IMX1
R404	61079-918-471	R-CHIP;RH C1608 CS 471-J
R405	61079-918-562	R-CHIP;RH C1608 CS 562-J
R406	61079-918-103	R-CHIP;RH C1608 CS 103-J
R407	61079-918-393	R-CHIP;RH C1608 CS 393-J
R408	61079-918-472	R-CHIP;RH C1608 CS 472-J
R409	61079-918-223	R-CHIP;RH C1608 CS 223-J
R410	61079-918-103	R-CHIP;RH C1608 CS 103-J
R411	61079-918-103	R-CHIP;RH C1608 CS 103-J
R415	61079-918-681	R-CHIP;RH C1608 CS 681-J
R418	61079-918-102	R-CHIP;RH C1608 CS 102-J
R419	61079-918-103	R-CHIP;RH C1608 CS 103-J
R420	61079-918-392	R-CHIP;RH C1608 CS 392-J
R421	61079-918-153	R-CHIP;RH C1608 CS 153-J
R422	61079-918-102	R-CHIP;RH C1608 CS 102-J
R423	61079-918-153	R-CHIP;RH C1608 CS 153-J
R424	61079-918-563	R-CHIP;RH C1608 CS 563-J
R425	61079-918-104	R-CHIP;RH C1608 CS 104-J
R426	61079-918-683	R-CHIP;RH C1608 CS 683-J
VR402	61249-924-002	VR-SEMI CHIP;EVM-1XSX50B14

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152	69063-213-855	ASSY-FPC FUNCTION CAMERA;VN-E405
SW510	B3006-0021	SW-SLIDE;2C2P SH30V ESD10621
SW511	63519-105-101	SW-TACT,CHIP;SKHMPS066A
SW512	63519-105-101	SW-TACT,CHIP;SKHMPS066A
SW513	63519-105-102	SW-TACT,CHIP;SKHMPT017A
SW514	63519-105-102	SW-TACT,CHIP;SKHMPT017A

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153	69063-214-068	ASSY CAM FUNCTION BOARD;VP-E405 PAL
C506	B1100-0630	C-CERAMIC,CHIP;GRM40 Y5V 105Z 16
C509	61628-309-107	C-TANTAL,CHIP;TAJD 107 M 6R3
CN522	B6010-0135	CONNECTOR-WAFER;52207-1390
L502	B1160-0009	INDUCTOR-CHIP;NLC322522T-220K
R501	61079-918-000	R-CHIP;RH C1608 CS 000-J
R502	61079-918-000	R-CHIP;RH C1608 CS 000-J
R503	61079-918-102	R-CHIP;RH C1608 CS 102-J
R520	61079-918-103	R-CHIP;RH C1608 CS 103-J
R521	61079-918-103	R-CHIP;RH C1608 CS 103-J
R522	61079-918-104	R-CHIP;RH C1608 CS 104-J
R523	61079-918-104	R-CHIP;RH C1608 CS 104-J
R524	61079-918-473	R-CHIP;RH C1608 CS 473-J
R525	61079-918-123	R-CHIP;RH C1608 CS 123-J
R526	61079-918-822	R-CHIP;RH C1608 CS 822-J
R527	61079-918-123	R-CHIP;RH C1608 CS 123-J
R528	61079-918-153	R-CHIP;RH C1608 CS 153-J
R529	61079-918-473	R-CHIP;RH C1608 CS 473-J
R530	61079-918-123	R-CHIP;RH C1608 CS 123-J
R531	61079-918-822	R-CHIP;RH C1608 CS 822-J
R532	61079-918-123	R-CHIP;RH C1608 CS 123-J
R533	61079-918-153	R-CHIP;RH C1608 CS 153-J
R534	61079-918-223	R-CHIP;RH C1608 CS 223-J
R535	61079-918-393	R-CHIP;RH C1608 CS 393-J
R536	61079-918-393	R-CHIP;RH C1608 CS 393-J
R537	61079-918-223	R-CHIP;RH C1608 CS 223-J
SW502	63519-105-101	SW-TACT,CHIP;SKHMPS066A
SW503	63519-105-101	SW-TACT,CHIP;SKHMPS066A

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
SW504	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW505	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW506	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW507	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW508	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW509	63519-105-101	SW-TACT.CHIP;SKHMPS066A
SW501	B3006-0021	SW-SLIDE;2C2P SH30V ESD10621

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165	69063-213-842	ASSY EVF BOARD;VP-E405 PAL
C701	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C702	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C703	61454-155-223	C-CERAMIC CHIP;C1608JB1C 223KT
C704	61628-309-100	C-TANTAL.CHIP;TAJA 225M 6R3
C705	B1102-0156	C-FILM,CHIP;CQS 162 M 16V T 104-J
C706	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
C707	61628-269-090	C-TANTAL.CHIP;TAJB475M010R
C708	61454-153-820	C-CERAMIC CHIP;C1608 CH1H820JT
C709	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
C710	61628-309-107	C-TANTAL.CHIP;TAJD 107 M 6R3
C711	61628-309-107	C-TANTAL.CHIP;TAJD 107 M 6R3
C712	61507-121-420	C-POLYESTER;CQ921M TAPG 100V 392-K
C713	61628-339-476	C-TANTAL.CHIP;TAJD 476M 010R
C714	61407-100-331	C-CERAMIC;HCYB3A 331KDT
C715	61454-246-293	C-ELEC.CHIP;ECE-V1HA3R3R
C716	61407-100-151	C-CERAMIC;HCYB3A 151KDT
C717	61454-159-104	C-CERAMIC CHIP;C1608F1E 104T-Z
CA702	63053-916-590	LEAD CONNECTOR ASSY;CGP1202-CDP5902 2P
CN701	63349-900-010	CONNECTOR;CGP1604-0101
CN702	63349-900-009	CONNECTOR;CGP1602-0101
CN703	63349-900-009	CONNECTOR;CGP1602-0101
CN704	63349-900-009	CONNECTOR;CGP1602-0101
CN705	A3047-0005	SOCKET-CRT;SOCKET FINDER PI.10 45MM
D701	62169-901-043	DIODE.CHIP;MA151K-(TX)
D702	62169-901-044	DIODE.CHIP;MA152WA/23316273R(1SS181)
FT701	62139-602-012	FBT;ECX-C2806A
IC701	62119-121-049	IC-FP;AN2512S-(E2)
L701	62429-961-474	INDUCTOR-CHIP;LQH3N 470-K
L702	62429-014-304	COIL-LINEARITY;ELH-5L218
LE701	62309-110-340	LED;GL-3HD7/GL3HD8
Q701	62129-301-172	TRANSISTOR.CHIP;2SD 968A-R/S(TX)
Q702	A4050-0104	TR-GENERAL,CHIP;2SA 1179
R701	61079-918-105	R-CHIP;RH C1608 CS 105-J
R702	61079-918-330	R-CHIP;RH C1608 CS 330-J
R703	61079-918-152	R-CHIP;RH C1608 CS 152-J
R704	61079-918-474	R-CHIP;RH C1608 CS 474-J
R705	61079-918-104	R-CHIP;RH C1608 CS 104-J
R706	61079-918-473	R-CHIP;RH C1608 CS 473-J
R707	61079-918-399	R-CHIP;RH C1608 CS 3R9-J
R708	61079-918-101	R-CHIP;RH C1608 CS 101-J
R709	61079-918-182	R-CHIP;RH C1608 CS 182-J
R710	61079-918-122	R-CHIP;RH C1608 CS 122-J
R711	61079-918-471	R-CHIP;RH C1608 CS 471-J
R712	61079-918-751	R-CHIP;RH C1608 CS 751-J
R713	61079-918-122	R-CHIP;RH C1608 CS 122-J
R714	61079-918-222	R-CHIP;RH C1608 CS 222-J
R715	61079-918-684	R-CHIP;RH C1608 CS 684-J
R716	61079-918-623	R-CHIP;RH C1608 CS 623-J
R717	61079-918-103	R-CHIP;RH C1608 CS 103-J
R718	61079-918-182	R-CHIP;RH C1608 CS 182-J
R719	61079-918-684	R-CHIP;RH C1608 CS 684-J
R720	61079-918-684	R-CHIP;RH C1608 CS 684-J
R721	61079-918-105	R-CHIP;RH C1608 CS 105-J
R722	61079-917-000	R-CHIP;RH C2012 CS 000-J
R723	61079-917-000	R-CHIP;RH C2012 CS 000-J
R724	61079-917-225	R-CHIP;RH C2012 CS 225-J
R725	61079-917-105	R-CHIP;RH C2012 CS 105-J

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
R726	61079-918-150	R-CHIP;RH C1608 CS 150-J
R727	61079-918-102	R-CHIP;RH C1608 CS 102-J
RT701	B1335-0002	THERMISTOR-CHIP;NTC CS 3216 3BH 471KC 470OH
VR701	61249-922-769	VR-SEMI CHIP;EVM-7JSX30B54
VR702	61249-922-771	VR-SEMI CHIP;EVM-7JSX30B52
VR703	61247-100-001	VR-SEMI;EVM-LSGA00BE6
VR704	61247-100-002	VR-SEMI;EVM-LSGA00B16

6-4. ACCESSORIES

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
		ADAPTOR;AC90/264V DC7.5V
		ASSY MAIN BOARD;AA-E1P/PAL
	A6006-0086	POWER-CORD;VP-E405
	B6006-0185	POWER-CORD;VP-E405/SEAU
	B6006-0184	POWER-CORD;VP-E405/SEUK
C101	B1102-0190	C-FILM;ECQ-U2A 224MV
C102	A1100-0450	C-CERAMIC;CK45B 400V 222M 12/SCE 2G 222M
C103	A1100-0450	C-CERAMIC;CK45B 400V 222M 12/SCE 2G 222M
C104	A1100-0450	C-CERAMIC;CK45B 400V 222M 12/SCE 2G 222M
C105	A1100-0450	C-CERAMIC;CK45B 400V 222M 12/SCE 2G 222M
C106	B1104-0456	C-ELEC;CE 04 W 400V 470-K ECA2GV 470Y
C107	A1102-0120	C-FILM;TM2JRB 103K
C108	61637-206-330	C-ELEC;CEAP 35V 33M SA(6X11)
C109	61637-508-101	C-ELEC-CEAP 50V 100M SG(10X12.5)
C110	61509-144-520	C-POLYESTER;ECQ-VIH104JZ3/24538104D
C111	61637-208-229	C-ELEC;CEAP 50V 2.2M SA (5X11)
C112	B1102-0193	C-FILM;CQ 922 M 50V T 391-J ECQ-B1H 391J F3
C113	61509-121-560	C-POLYESTER;CQ92IM 100V 124-K
C114	61507-121-341	C-POLYESTER;CQ921M TAPG 50V 102-J
C151	61507-121-341	C-POLYESTER;CQ921M TAPG 50V 102-J
C152	61507-121-341	C-POLYESTER;CQ921M TAPG 50V 102-J
C153	61637-504-102	C-ELEC;CEAP 16V 1000M SG(10X20)
C154	A1104-0480	C-ELEC;CE 04 F 16V T 471-M STX/KME -40/105
C155	61637-208-229	C-ELEC;CEAP 50V 2.2M SA (5X11)
C156	61509-144-520	C-POLYESTER;ECQ-VIH104JZ3/24538104D
C157	61647-708-010	C-ELEC;CEAP 50V 1M SS(2.5)
C160	61509-121-470	C-POLYESTER;CQ921M 100V 103-K
CN151	B6010-0337	CONNECTOR WAFER;B8P-MQ WHT 8P
D101	B4104-0041	DIODE-RECT;SIWBA60 600V 1A
D102	B4112-0006	DIODE-SCHOTTKY;ERA22-10(1KV 0.5A)
D103	B4106-0049	DIODE-ZENER;MTZ-20B
D104	B4112-0006	DIODE-SCHOTTKY;ERA22-10(1KV 0.5A)
D105	B4112-0006	DIODE-SCHOTTKY;ERA22-10(1KV 0.5A)
D106	62169-406-482	DIODE;1N4148 SAMSUNG
D107	A4106-0006	ZENER DIODE:MTZ 4.7B
D108	62169-403-836	DIODE ZENER;UZ 24BH
D151	B4112-0002	DIODE-SCHOTTKY;ESAC85M-009(90V 10A)
D152	62169-501-064	DIODE;1N5819(ERB 81-004)V
D153	62169-403-821	DIODE-ZENER;MTZ 5.1B
D154	62169-406-482	DIODE;1N4148 SAMSUNG
D155	62169-406-482	DIODE;1N4148 SAMSUNG
F101	A3065-0154	FUSE;T1.25A 250V 51S 5X20MM SJ DOM
F151	B3065-0114	FUSE-MICRO;TR/MCR-2.0BUSS
IC101	B4008-1002	IC;FA5304 DIP
IC102	B4010-0011	IC;PC113(L) DIP
IC151	62109-103-330	IC;LM358N
L101	A1151-0001	COIL-LINE FILTER;BSF-2133 20MH
L151	A1132-0008	COIL-PEAKING;10UH-J RA EL0606RA-100J Q80
Q101	B4054-0018	FET;2SK904
Q151	B4052-0027	TR;2SB1127S
Q152	A4056-0019	TR-SWITCHING:2SD1207T 1W 150MHZ SI/NPN T
Q153	B4060-0021	TR;DTC114ES
Q154	B4060-0021	TR;DTC114ES
R101	61048-177-275	R-METAL FILM;RM 1/8 T 274-J
R102	B1012-0014	R-WIRE WOUND;RW 2P 3.3-K
R103	61048-177-823	R-METAL FILM;RM 1/8 T 823-J
R104	61048-177-823	R-METAL FILM;RM 1/8 T 823-J
R105	61048-177-823	R-METAL FILM;RM 1/8 T 823-J
R106	61049-527-473	R-METAL OXIDE;RS 2 P 473-J
R107	A1010-0004	R-FUSIBLE;RF 1/2P 010-J
R108	61048-177-221	R-METAL FILM;RM 1/8 T 221-J
R109	A1004-0220	R-METAL OXIDE;RS 1 P R47-J
R110	61048-177-330	R-METAL FILM;RM 1/8 T 330-J
R111	61048-177-330	R-METAL FILM;RM 1/8 T 330-J
R112	61048-177-155	R-METAL FILM;RM 1/8 T 155-J
R113	61048-177-822	R-METAL FILM;RM 1/8 T 822-J
R114	61048-177-823	R-METAL FILM;RM 1/8 T 823-J
R150	61048-177-272	R-METAL FILM;RM 1/8 T 272-J
R151	61048-277-100	R-METAL FILM;RM 1/4 T 100-J
R152	61048-177-681	R-METAL FILM;RM 1/8 T 681-J
R153	61048-177-272	R-METAL FILM;RM 1/8 T 272-J
R154	61048-177-911	R-METAL FILM;RM 1/8 T 911-J
R155	61048-177-222	R-METAL FILM;RM 1/8 T 222-J
R156	61048-177-104	R-METAL FILM;RM 1/8 T 104-J
R157	61048-177-472	R-METAL FILM;RM 1/8 T 472-J
R158	61048-177-472	R-METAL FILM;RM 1/8 T 472-J
R159	61048-177-100	R-METAL FILM;RM 1/8 T 100-J
R160	A1004-0221	R-METAL OXIDE;RS 1 P 0R1-J
R161	61048-177-221	R-METAL FILM;RM 1/8 T 221-J
R162	61048-177-123	R-METAL FILM;RM 1/8 T 123-J
R163	61048-177-911	R-METAL FILM;RM 1/8 T 911-J
R164	61048-177-104	R-METAL FILM;RM 1/8 T 104-J
R165	61048-177-621	R-METAL FILM;RM 1/8 T 621-J
R166	A1010-0012	R-FUSIBLE;RF 1/2P 4R7-J
R167	61049-327-101	R-METAL OXIDE;RS 1 P 101-J
R168	61048-177-103	R-METAL FILM;RM 1/8 T 103-J
R169	61048-277-151	R-METAL FILM;RM 1/4 T 151-J
R170	61048-177-103	R-METAL FILM;RM 1/8 T 103-J
T101	A1199-0020	TRANS-POWER;EI2519
VR151	B1054-0138	VR-SEMI;KVSF 637A 1/2W 1KVB
VR152	B1054-0139	VR-SEMI;KVSF 637A 1/2W 5KVB
45	69063-213-943	ASSY SUB 1 BOARD;AA-E1 NTSC/PAL
C158	A1100-0005	C-CERAMIC.CHIP;2012F 563M
C159	61647-702-470	C-ELEC;CEAP 6.3V 47M SS(2.5)
C160	61454-143-473	C-CERAMIC.CHIP;0805 5E 473ZAT MA
C161	A1100-0011	C-CERAMIC.CHIP;2012B 103K
C162	61647-708-010	C-ELEC;CEAP 50V 1M SS(2.5)
C163	61453-131-105	C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG
CN152	B6010-0338	CONNECTOR WAFER;08MQ-ST WHT 8P
D156	B4150-0044	LED;SLB25MG
D157	B4106-0050	DIODE-ZENER;MTZ-15B
D158	B4106-0050	DIODE-ZENER;MTZ-15B
D159	62169-901-042	DIODE.CHIP;DAN202K
D160	B4150-0045	LED;SLB25YY
D161	62169-901-042	DIODE.CHIP;DAN202K
D162	62169-901-042	DIODE.CHIP;DAN202K
IC152	62109-201-410	IC;MC78L05(T)
IC153	62109-201-314	IC;MB88211PF-166
J151	63335-501-007	DC-JACK;HEC 0738-010010
L152	A1130-0020	COIL-CHOKE;100UH(PI0.35)
Q155	B4060-0021	TR;DTC114ES
Q156	62129-101-140	TRANSISTOR.CHIP;KSR 2104(REEL)
Q157	62129-101-110	TRANSISTOR.CHIP;KSR 1102 (REEL)
R171	61079-917-391	R-CHIP;RH C2012 CS 391-J
R172	61079-917-472	R-CHIP;RH C2012 CS 472-J
R173	61079-917-103	R-CHIP;RH C2012 CS 103-J
R174	61079-917-223	R-CHIP;RH C2012 CS 223-J
R175	61079-917-102	R-CHIP;RH C2012 CS 102-J
R176	61079-917-391	R-CHIP;RH C2012 CS 391-J
R177	61079-917-561	R-CHIP;RH C2012 CS 561-J
R178	61079-917-273	R-CHIP;RH C2012 CS 273-J
R179	61079-917-183	R-CHIP;RH C2012 CS 183-J
R180	61079-917-243	R-CHIP;RH C2012 CS 243-J
R181	61079-917-561	R-CHIP;RH C2012 CS 561-J
R182	61079-917-821	R-CHIP;RH C2012 CS 821-J
SW151	B3020-0008	SW-MICRO;D2A-1210
X151	B1283-0013	CERAMIC-RESONATOR;FCR 4.0MC(4.0MHZ)

NO	1	2	3	4	5	6	7	8	9	10
ITEM BUYER	UNIT BATTERY PACK	DC-CABLE	UNIT-RF	8mm VIDEO CASSETTE(P5-60)	ADAPTOR	SHOULDER - STRAP	LITHIUM BATTERY PACK	UNIT REMOCON	CABLE-A/V	RGB 21P CABLE ASSY
AMFO	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
AND	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
BHA	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
DIN	67179-0139-00	63054-410-041	-	63174-600-030	A7008-0048	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	66449-0020-00
EDIS	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
ERGO	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
ETR	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
EURO	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
ISSA	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
JUMA	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
MAR	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
NSI	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
ORI	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
POL	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
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RIE	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SEAU	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0050	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SECO	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SEF	67179-0139-00	63054-410-041	-	63174-600-030	A7008-0048	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	66449-0020-00
SEG	67179-0139-00	63054-410-041	-	63174-600-030	A7008-00039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	66449-0020-00
SEH	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SEI	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
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SEP	67179-0139-00	63054-410-041	67179-0004-00	63179-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SES	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SETA	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SEUK	67179-0139-00	63054-410-041	-	63174-600-030	A7008-0045	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	66449-0020-00
SGE	67179-0139-00	63054-410-041	-	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	66449-0020-00

NO / ITEM / BUYER	1	2	3	4	5	6	7	8	9	10
	UNIT BATTERY PACK	DC-CABLE	UNIT-RF	8mm VIDEO CASSETTE(P5-60)	ADAPTOR	SHOULDER - STRAP	LITHIUM BATTERY PACK	UNIT REMOCON	CABLE-A/V	RGB 21P CABLE ASSY
SIM	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
SING	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
TAW	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0048	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-
ZAMA	67179-0139-00	63054-410-041	67179-0004-00	63174-600-030	A7008-0039	67853-600-240	64539-502-105	67179-0127-00	66449-0001-00	-

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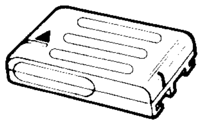
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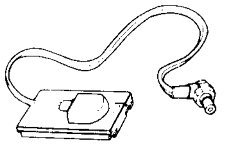
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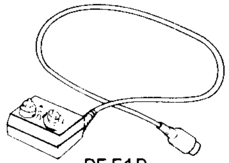
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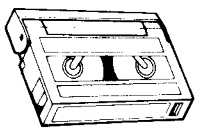
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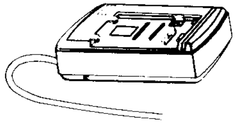
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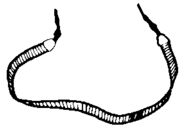
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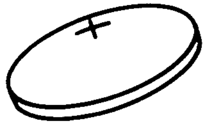
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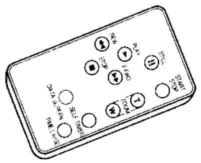
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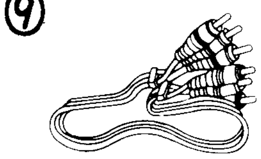
CABLE AV

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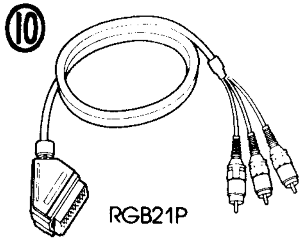

RGB21P

7. EXPLODED VIEW / PARTS LIST

Page

7-1. Instrument Assembly (1) - - - - - - - - - - - - - 7-2

7-2. Instrument Assembly (2) - - - - - - - - - - - - - 7-4

7-3. Instrument Assembly (3) - - - - - - - - - - - - - 7-6

7-4. Mechanical Parts (1) - - - - - - - - - - - - - - - - 7-8

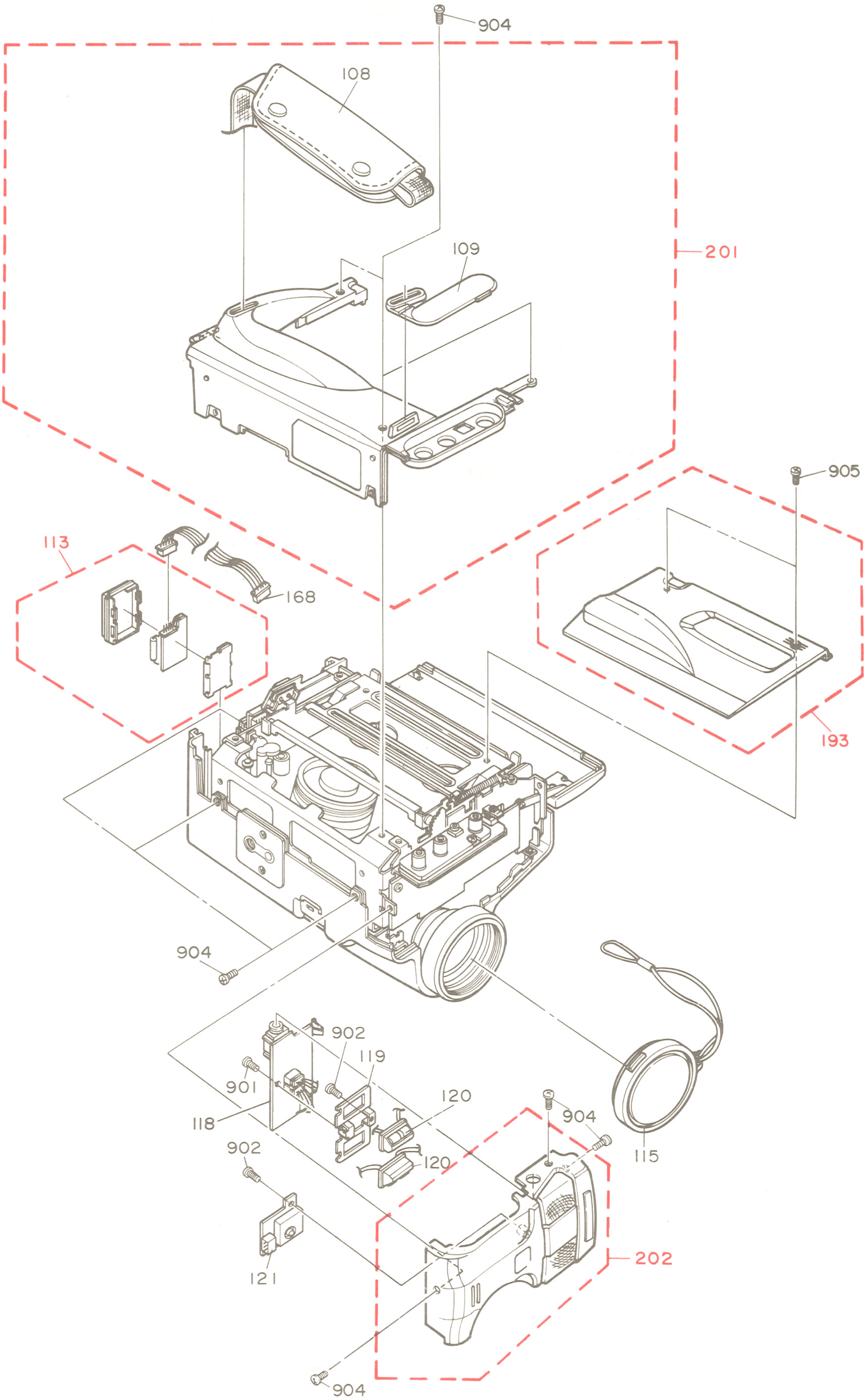
7-5. Mechanical Parts (2) - - - - - - - - - - - - - - - - 7-10

7-6. Mechanical Parts (3) - - - - - - - - - - - - - - - - 7-12

7-7. E.V.F - 7-14

7-8. Adaptor - 7-16

7-1. Instrument Assembly (1)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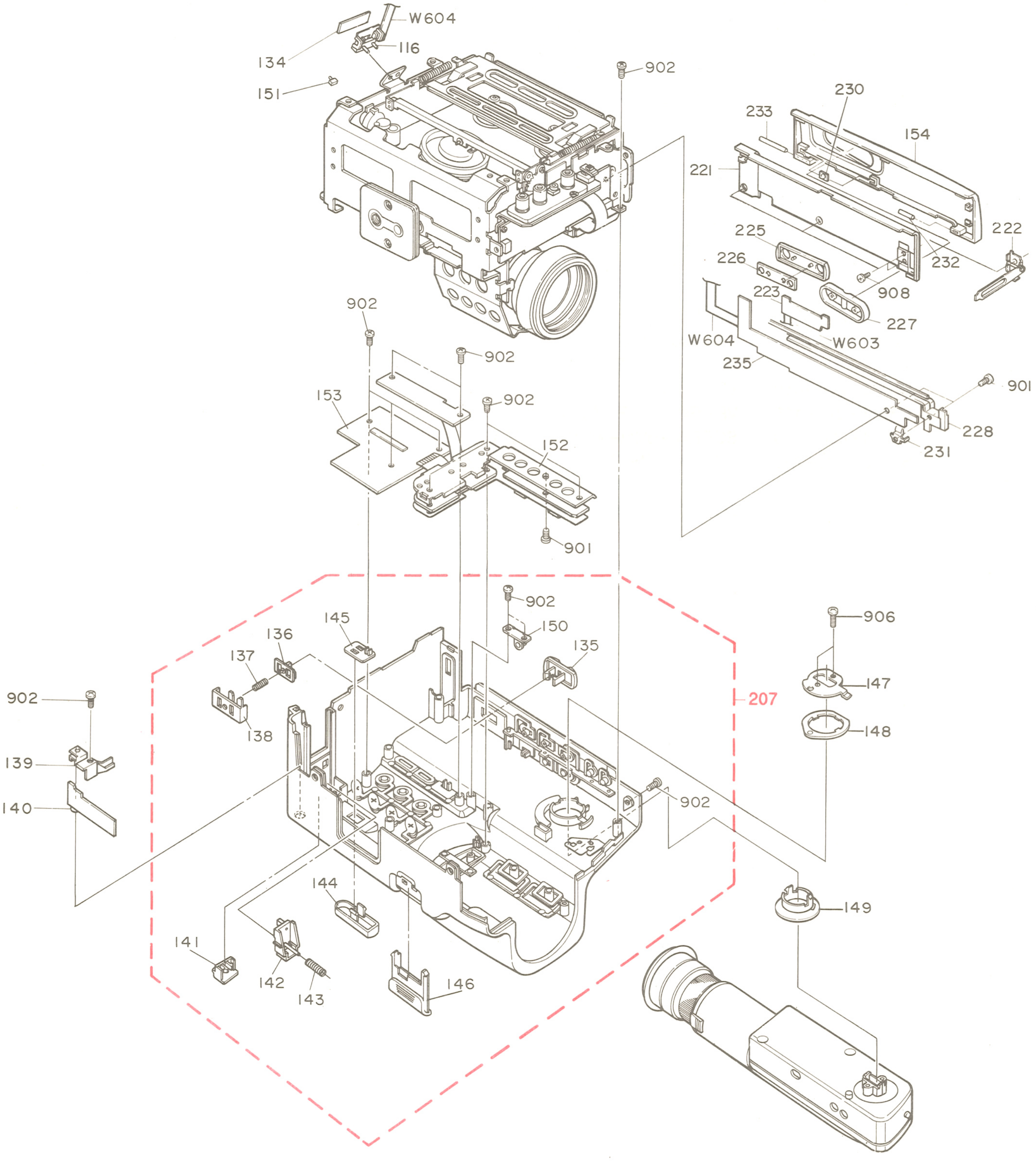
109
201
905
113
168
193
904
902
119
901
120
118
904
902
120
115
121
202
904

LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
108		UNIT-BELT GRIP ASSY
	67179-0061-00	VP-E405
	67179-0061-04	VP-E405/QUE (VKR4630)
109	63314-0050-00	COVER-A/V JACK;TPE T1.5 BLK
113	67179-0132-00	UNIT-BATTERY TERMINAL;VP-E807
115	69063-213-735	ASSY-HOOD;VN-E405 NTSC
118	69063-213-808	ASSY MIC BOARD;VP-E405 PAL
119	63013-0083-00	BRACKET-MIC;STS304 T0.4 VN-E405
120	A7002-0001	MIC ASSY;ECM-SO 6H
121	69063-213-479	ASSY-REMOCON MODULE BOARD;VN-E405 NTSC
168	63053-916-578	LEAD CONNECTOR ASSY;1061 #28 1205-1205 5P 60MM
193		ASSY-COVER HOUSING
	69063-214-048	VP-E405
	69063-214-104	VP-E405/QUE (VKR4630)
201		ASSY-CASE RIGHT
	69063-214-049	VP-E405
	69063-214-105	VP-E405/QUE (VKR4630)
202		ASSY-CASE FRONT
	69063-214-050	VP-E405
	69063-214-106	VP-E405/QUE (VKR4630)
901	67094-604-310	SCREW-BH;3+M2X3 FE FZW
902	67128-522-240	SCREW-TAP TITE BH;2X4 FE FZB
904	67094-120-240	SCREW-BH;M2X4 FE FZB
905	A0100-0103	SCREW-MACHINE;BH UP M1.7 5 SWRCH10A SPC2 BLK

7-2. Instrument Assembly (2)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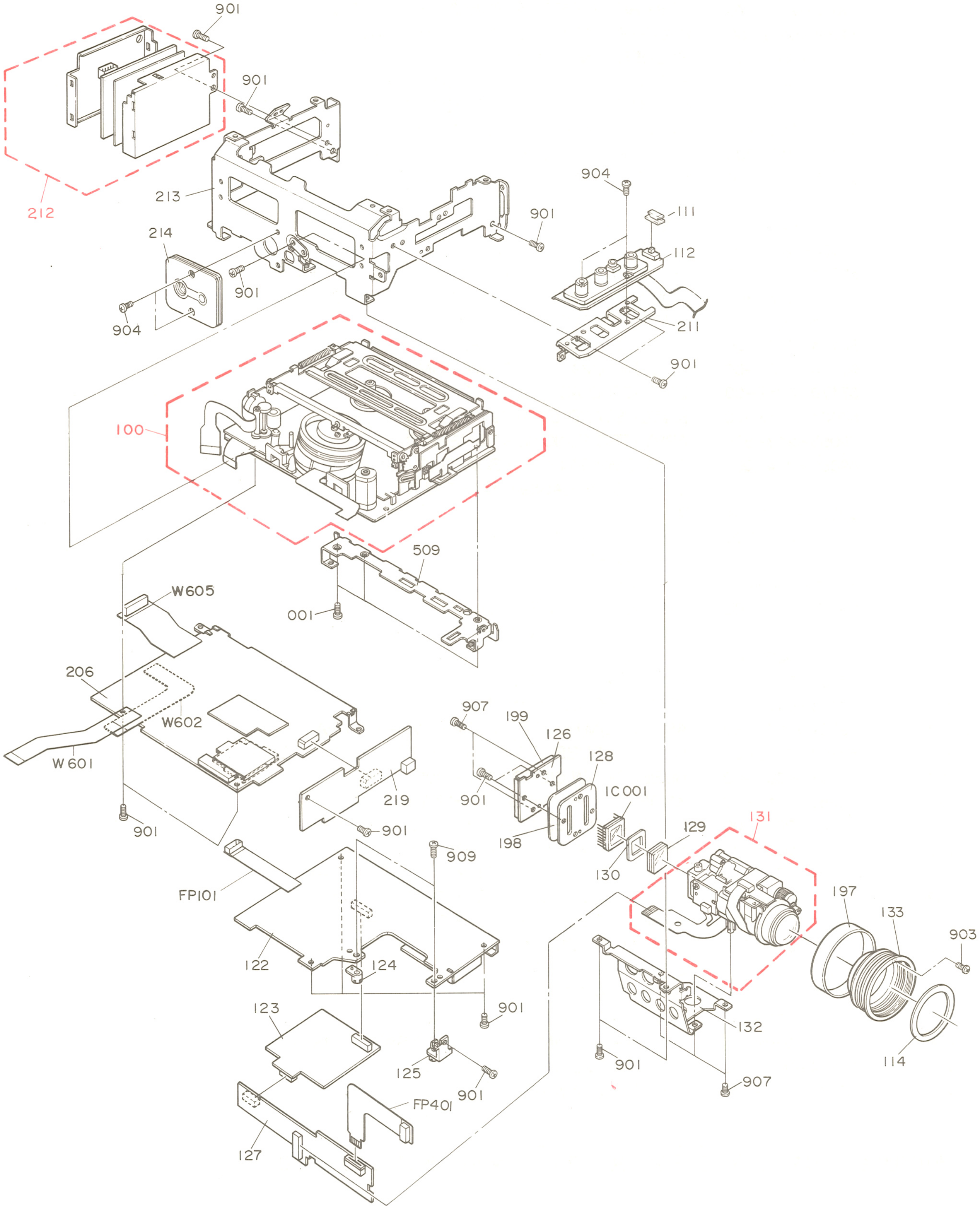
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
116	63324-0075-00	HOLDER-START/STOP;ABS 94 HB T1 BLK VN-E405
134	69063-214-070	ASSY REC FUNCTION BOARD;VP-E405 PAL
135	64084-0127-00	KNOB-POWER;ABS94HB BLK VN-E405
136	63324-0074-00	HOLDER-KNOB POWER;ABS94HB T1 RED(VN-E405)
137	66674-641-610	SPRING-KNOB POWER;SUS304 WPB
138	63384-0019-00	STOPPER-LOCKER KNOB POWER;ABS94HB T1 BLK
139	63323-0069-00	HOLDER-EARPHONE;ABS94HB T1.0 BLK VN-E405
140	69063-213-809	ASSY HEADPHONE BOARD;VP-E405 PAL
141	64083-0125-00	BUTTON-LOCK BATTERY;ABS94HB BLK VN-E405
142	63323-0072-00	HOLDER-LOCK BATTERY;ABS94HB T1 BLK VN-E405
143	66674-641-710	SPRING-LOCK BATTERY;SUS304 WPB
144	64083-0122-00	KNOB-AUTO LOCK;ABS94HB T1 BLK VN-E405
145	63324-0071-00	HOLDER-AUTO LOCK;POM NAT T1 BLK VN-E405
146	63323-0070-01	HOLDER-LI BATTERY;ABS94HB T1.0 BLK SV-E415
147	63074-0010-00	SUPPORT-EVF;STS T0.8 VN-E405
148	60104-0028-00	PLATE-SPRING EVF;C1720S T0.4 VN-E405
149	61644-0020-00	SLIDER-RING ROTATE EVF;POM T1 BLK(VN-E405)
150	67179-0057-00	UNIT-STUD ASSY;CASE LEFT ASSY VN-E405
151	64084-0153-00	KNOB-STAND BY;ABS94HB BLK VN-E405
152	69063-213-855	ASSY-FPC FUNCTION CAMERA;VN-E405
153	69063-214-068	ASSY CAM FUNCTION BOARD;VP-E405 PAL
154		CASE-COVER;ABS94HB T1.5 BLK
	62031-0051-04	VP-E405
	62031-0051-05	VP-E405/QUE (VKR4630)
207		ASSY-CASE LEFT
	69063-214-052	VP-E405
	69063-214-108	VP-E405/QUE (VKR4630)
221		CASE-INNER COVER;ABS94HB T1.5 BLK
	62031-0050-02	VP-E405
	62031-0050-00	VP-E405/QUE (VKR4630)
222	67179-0108-00	UNIT-BRKT LOCK;VN-E405
223	69063-214-069	ASSY ZOOM FUNCTION BOARD;VP-E405 PAL
225	63324-0063-00	HOLDER-RUBBER T/W;ABS94HB T1.0 BLK VN-E405
226	63393-0004-00	RUBBER-T/W;SILICON(VN-E405)
227	64083-0114-00	KNOB-T/W;ABS94HB T0.1 BLK VN-E405
228	63322-0076-00	HOLDER-COVER;ABS94HB T1 BLK VN-E405
230	63014-0086-00	BRACKET-NUT;SECC T0.8 VN-E405
231	60104-0029-00	PLATE-SPRING OPEN;C1720S T0.15 VN-E405
232	61404-0034-00	SHAFT-COVER(B);SUS D1.5 GRY VN-E405
233	61404-0033-00	SHAFT-COVER(F);SUS D1.5 GRY VN-E405
235	69063-214-067	ASSY MAIN FUNCTION BOARD;VP-E405 PAL
901	67094-604-310	SCREW-BH;3+M2X3 FE FZW
902	67128-522-240	SCREW-TAP TITE BH;2X4 FE FZB
906	67128-520-206	SCREW-TAP TITE PLAIN;B+2X6 FE FZB
908	A0100-0102	SCREW-MACHINE;BH UP M1.7 3 SWRCH10A ZPC2 BLK
W603	66044-0078-00	FPC;FPC T0.2 VP-E405 30.5X10.3
W604	66044-0079-00	FPC;FPC T0.2 VP-E405 43.3X45.5

When ordering Loca.NO 134 be sure to order Loca. NO 116 & 151 together

7-3. Instrument Assembly (3)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FP101
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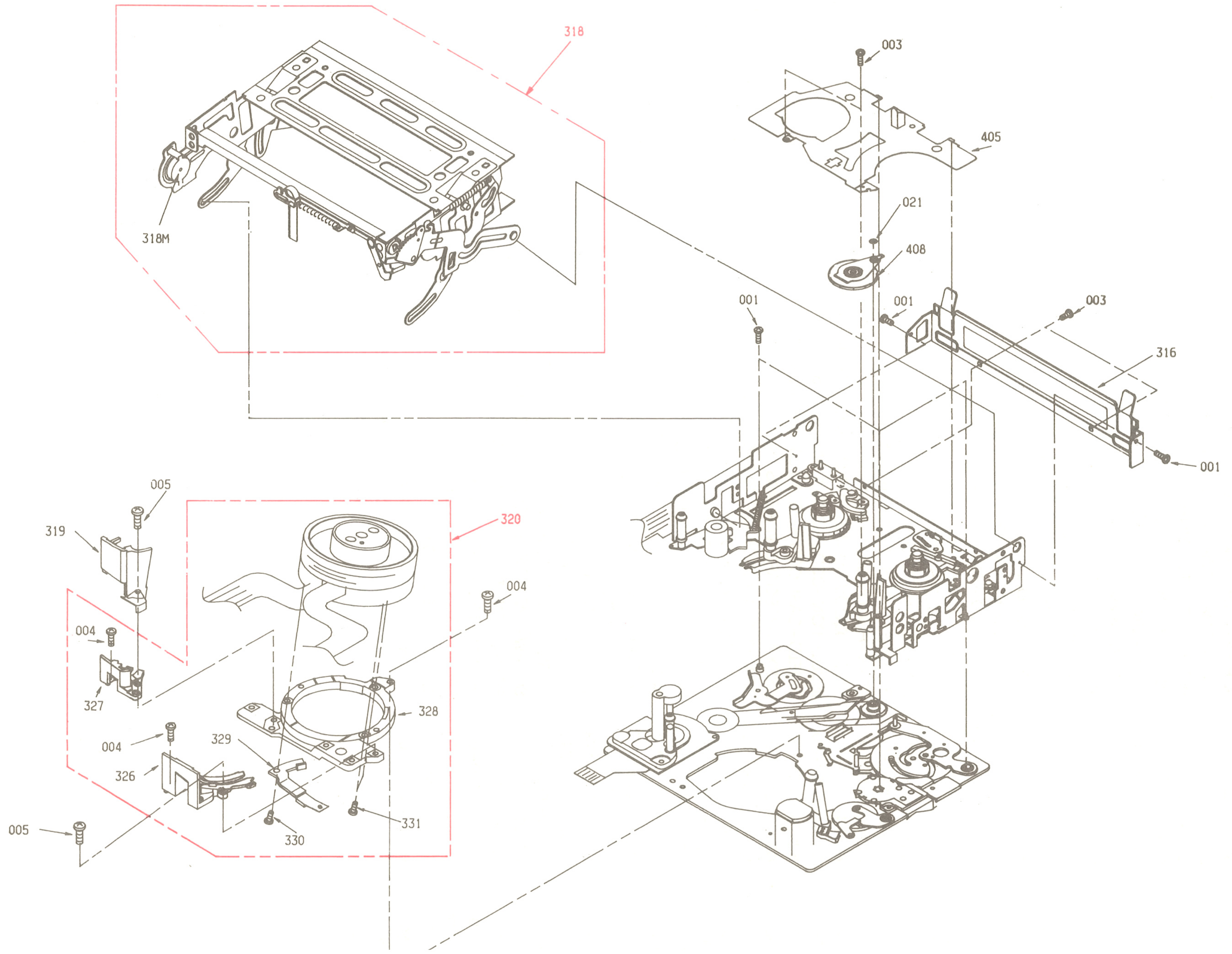
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
001	60504-0005-00	SCREW-BH;BH + M1.4 L2 WHT
100	DE-4P	ASSY COMPACT DECK;8MM PI40 3H'D PAL
111	64084-0269-00	KNOB-OUTPUT;ABS94HB BLK VP-E405
112	69063-213-478	ASSY-A/V JACK BOARD;VN-E405 NTSC
114	64014-0076-00	INLAY-LENS;PVC T0.5 BLK VN-E405
122	69063-213-837	ASSY CAM MAIN BOARD;VP-E405 PAL
123	69063-213-839	ASSY S/IMPOSE BOARD;VP-E405 PAL
124	63324-0145-00	HOLDER-C PCB;POM T1 NTR
125	63323-0146-00	HOLDER-LENS(B);POM T1 NTR
126	69063-213-840	ASSY CCD BOARD;VP-E405 PAL
127	69063-213-838	ASSY LENS BOARD;VP-E405 PAL
128	60104-0030-00	PLATE-CCD;A5083P T1.5 VN-E405
129	B1240-0046	FILTER-LC;SV-511B(OLPF)
130	63304-0008-00	SPACER-CCD;SILICON
131	62719-0004-00	LENS-ZOOM;T8D D25
132	63012-0091-00	BRACKET-LENS;A5030P-0 T0.8 VN-E405
133	62712-0005-00	LENS-HOOD;ABS94HB D45
197	60574-0001-02	RING-HOOD;ABS94HB ID42 OD46 BLK T3 VN-E405
198	60244-0020-00	INSULATION-CCD;PVC T0.2 W24.5 L25.5
199	62073-0055-00	SHIELD-CASE CCD;SPTE T0.25 GRY VN-E405
206	69063-213-805	ASSY MAIN BOARD;VP-E405 PAL
211	63013-0088-00	BRACKET-A/V JACK;ALP T0.8 VN-E405
212	69063-214-137	ASSY DC/DC CON BOARD;VP-E405 PAL
213	62211-0036-00	FRAME-MAIN;ALP T0.8 VN-E405
214	63323-0064-00	HOLDER-TRIOD;ABS94HB+SUS T1.5 VN-E405
219	69063-213-807	ASSY AUDIO BOARD;VP-E405 PAL
509	63012-0089-00	BRACKET-DECK;ALP T0.8 VN-E405
901	67094-604-310	SCREW-BH;3+M2X3 FE FZW
903	67158-241-173	SCREW-TAP BH;3+1.7X3 FZB
904	67094-120-240	SCREW-BH;M2X4 FE FZB
907	A0102-0026	SCREW-TAP TITE;BH M1.7 5 SWRCH10A ZPC2 BLK TB
907	A0102-0026	SCREW-TAP TITE;BH M1.7 5 SWRCH10A ZPC2 BLK TB
909	A0102-0027	SCREW-TAP TITE;BH M1.7 8 SWRCH10A ZPC2 BLK TB
FP101	66049-0029-00	FPC;FPC T0.2 VN-E405 60X11
FP401	66049-0030-00	FPC;FPC T0.2 VN-E405 35X28
IC001	B4014-0007	IC-CCD;TCD5251D DIP
W601	66044-0081-00	FPC;FPC T0.2 VP-E405 37X110
W602	69063-214-095	ASSY FPC-CAM;FPC T0.2 VP-E405 80X44.5
W605	66049-0041-00	FPC-DC/DC;FPC T0.2 SV-E405 35X25

7-4. Mechanical Parts (1)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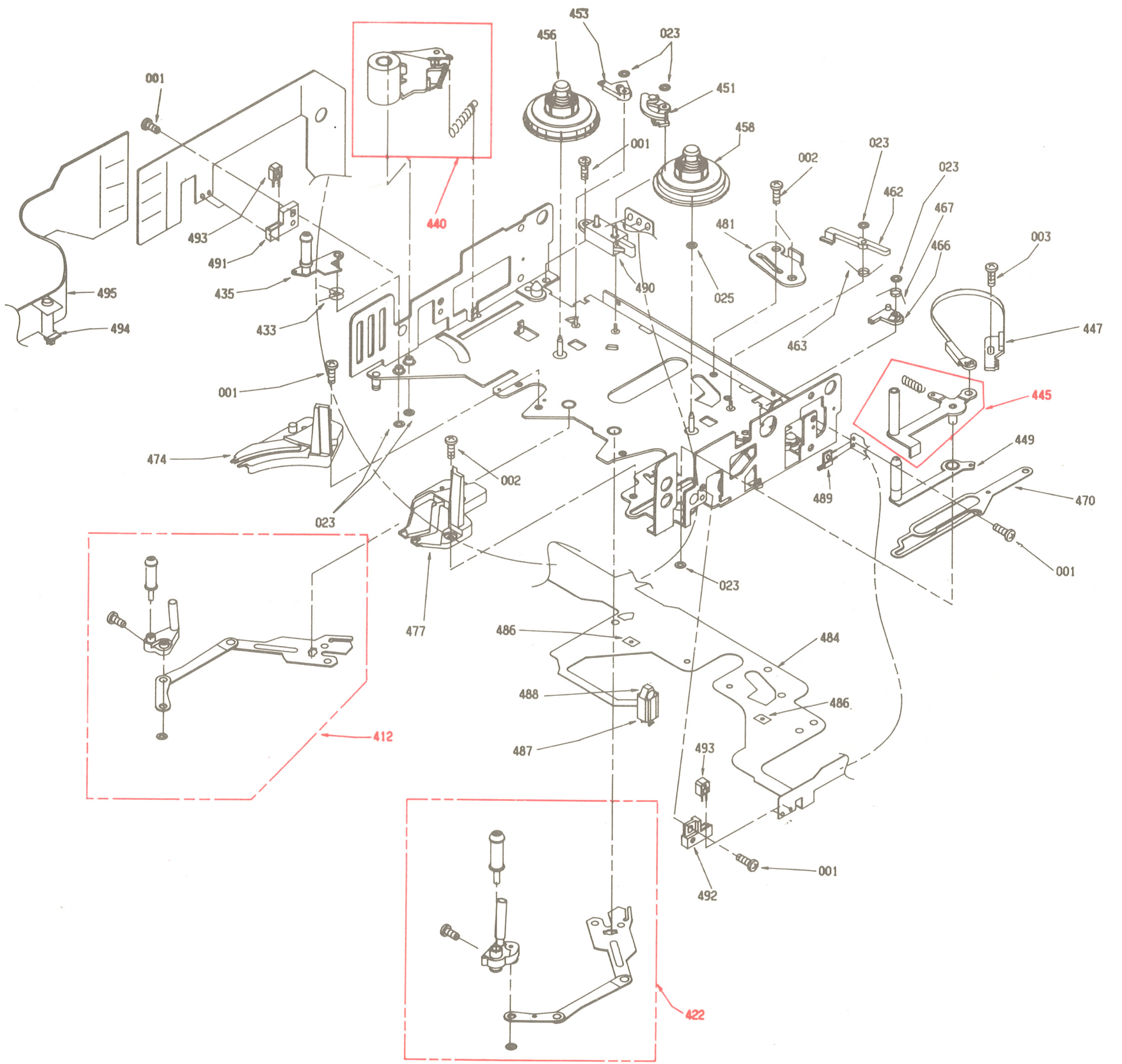
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
001	60504-0005-00	SCREW-BH;BH + M1.4 L2 WHT
003	60504-0017-00	SCREW;BH + FP M1.4 L2.2 S45C-HC BLK
004	60504-0038-00	SCREW-MACHINE;BH B M1.7 L5 FE WHT
005	60504-0039-00	SCREW-MACHINE;BH B M1.7 L8 FE WHT
021	60534-0005-00	WASHER-SLIT;ID0.75 OD2.0 T0.2 POLYSLIDER
316	63312-0011-00	COVER-BACK;A5052 BLK T0.6
318	62051-0012-00	HOUSING-ASS'Y;STS304/STS303 T0.5 DE-4
318M	62663-0014-00	DAMPER-HOUSING;SUS/POM/NYLON 30G DE-2A
319	63353-0057-00	GUIDE-TAPE T;DURACON M90-02 NTR
320	69063-213-834	ASSY DRUM;DE-4SPN-SS
326	63081-0011-00	RAIL-STOPPER L;ZDC12
327	63082-0012-00	RAIL-STOPPER R;ZDC12
328	62201-0073-00	BASE-DRUM;ADC-12 GRY DE-4
329	66534-0006-00	CONTACT-EARTH BRUSH ASS'Y;SECC/PBSP/CR/C DE-4
330	60509-0065-00	SCREW-MACHINE;BH UP M2 L7 SWRCH10A WHT WL
331	67094-604-410	SCREW-BH;1+M2X5 FE FZY,WL
405	63312-0005-00	COVER-REEL ASSY;SUS304-CSP T0.2+DURACON M90-02 BLK
408	61603-0001-00	IDLER-ASSY;DE-3

7-5. Mechanical Parts (2)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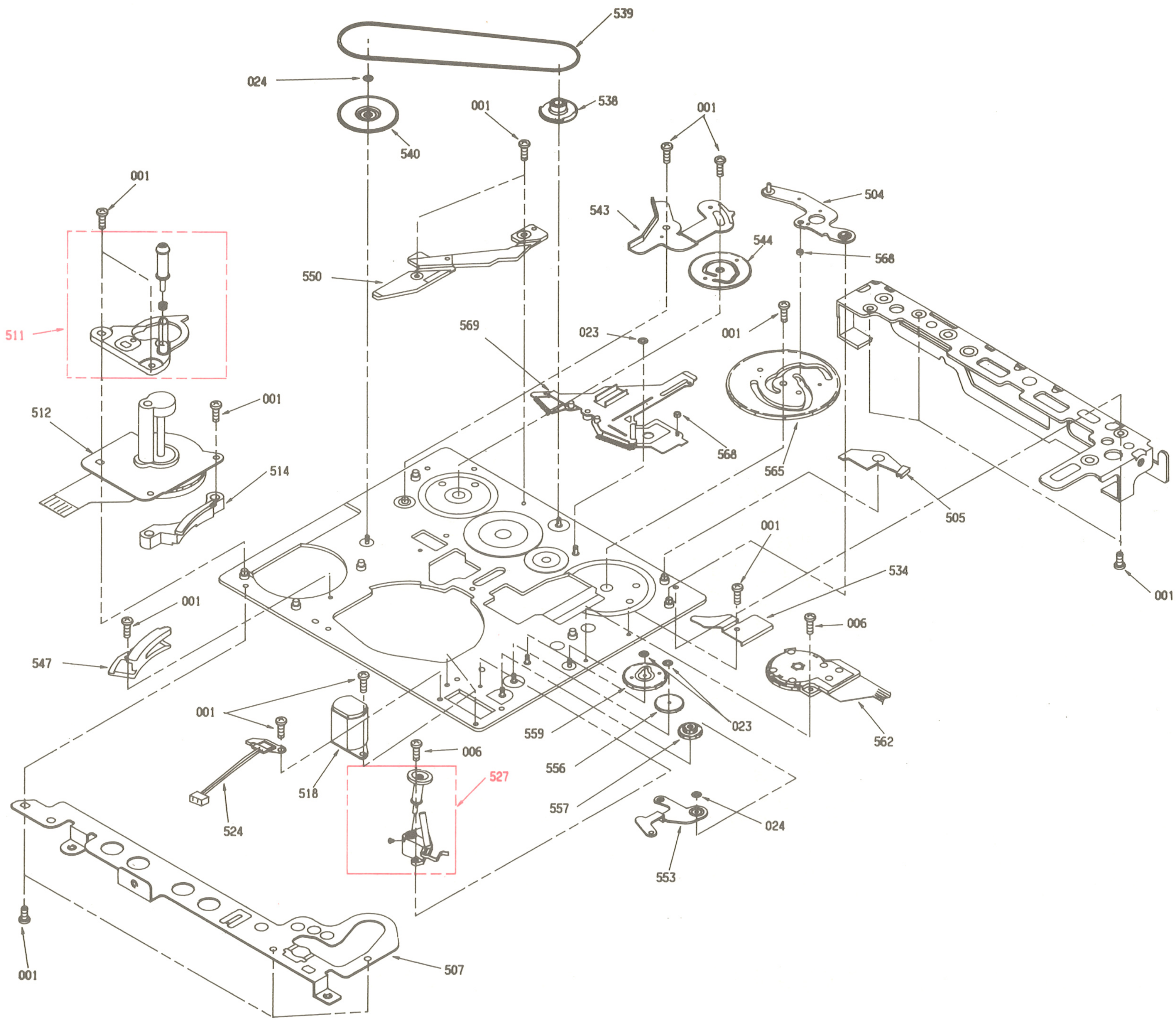
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
001	60504-0005-00	SCREW-BH;BH + M1.4 L2 WHT
002	60504-0015-00	SCREW;BH + FP M1.4 L1.2 S45C-HC BLK
023	60534-0006-00	WASHER-SLIT;PI0.95 OD2.5 T0.25
025	60534-0023-00	WASHER-SLIT;ID2.6 OD5 T0.25 POLYSLIDER BLK
412	69063-213-696	ARM-POLE BASE T.ASSY;DE-4
422	69063-213-697	ARM-POLE BASE S.ASSY;DE-4
433	62724-0099-00	SPRING-(T) REVIEW ARM;TS SUS304WPB PI0.26 D2.93
435	61543-0059-00	ARM-REVIEW ASS'Y;STS303/STS304/CSP
440	61544-0046-00	ARM-PINCH R ASS'Y;DE-4
445	61543-0061-00	ARM-TENSION;STS303/STS304 T0.5 L43
447	63324-0057-00	HOLDER-TEN BAND ASS'Y;DE-4
449	61534-0068-00	LEVER-GUIDE ASS'Y;STS303/POM
451	61543-0012-00	ARM-CLUTCH ASSY;DURACON M90-02
453	61534-0059-00	LEVER-BRAKE T ASS'Y;DE-4
456	61573-0005-00	REEL-DISK T ASSY;DE-3
458	61573-0001-00	REEL-S ASSY;DE-3
462	62614-0006-00	BRAKE-LEVER S;DURACON M90-02 NAT DE-4
463	62724-0088-00	SPRING-LEVER BRAKE S;SUS304 WPB
466	61543-0049-00	ARM-BRAKE S;DURACON M90-02 NAT
467	62724-0087-00	SPRING-ARM BRAKE S;SUS304 WPB
470	61643-0018-00	SLIDER-L.G;SUS304-CSP 0.4T
474	63082-0008-00	RAIL-GUIDE T;DURACON M90-02(BLK)
477	63081-0009-00	RAIL-GUIDE S;DURACON M90-02 NAT
481	63334-0003-00	CLAMP-LOCKER SUB CHASSIS;SUS304-CSP T0.6
484	69063-213-843	ASSY-FPC SUB CHASSIS;DE-4
486	62599-099-033	SENSOR-REEL;TLP 907Y
487	63324-0014-00	HOLDER-CASSETTE LED;DURACON M90-02(BLK)
488	62309-112-045	LED-IR;GL453
489	63535-501-003	SW-LEAF;LSA-1110 BIAUS
490	66204-0002-00	SWITCH-DETECTOR;D22P-2100
491	63323-0016-00	HOLDER-END SENSOR;DURACON M90-02(BLK)
492	63323-0015-00	HOLDER-START SENSOR;DURACON M90-02(BLK)
493	66214-0014-00	SENSOR-TOP/END;PT4800F
494	63323-0017-00	HOLDER-FPC;DURACON M90-02(NAT)
495	66044-0021-00	FPC-CONNECTION;FPC T0.2 DE-4
497	62201-0040-00	CHASSIS-SUB ASS'Y;DE-4

7-6. Mechanical Parts (3)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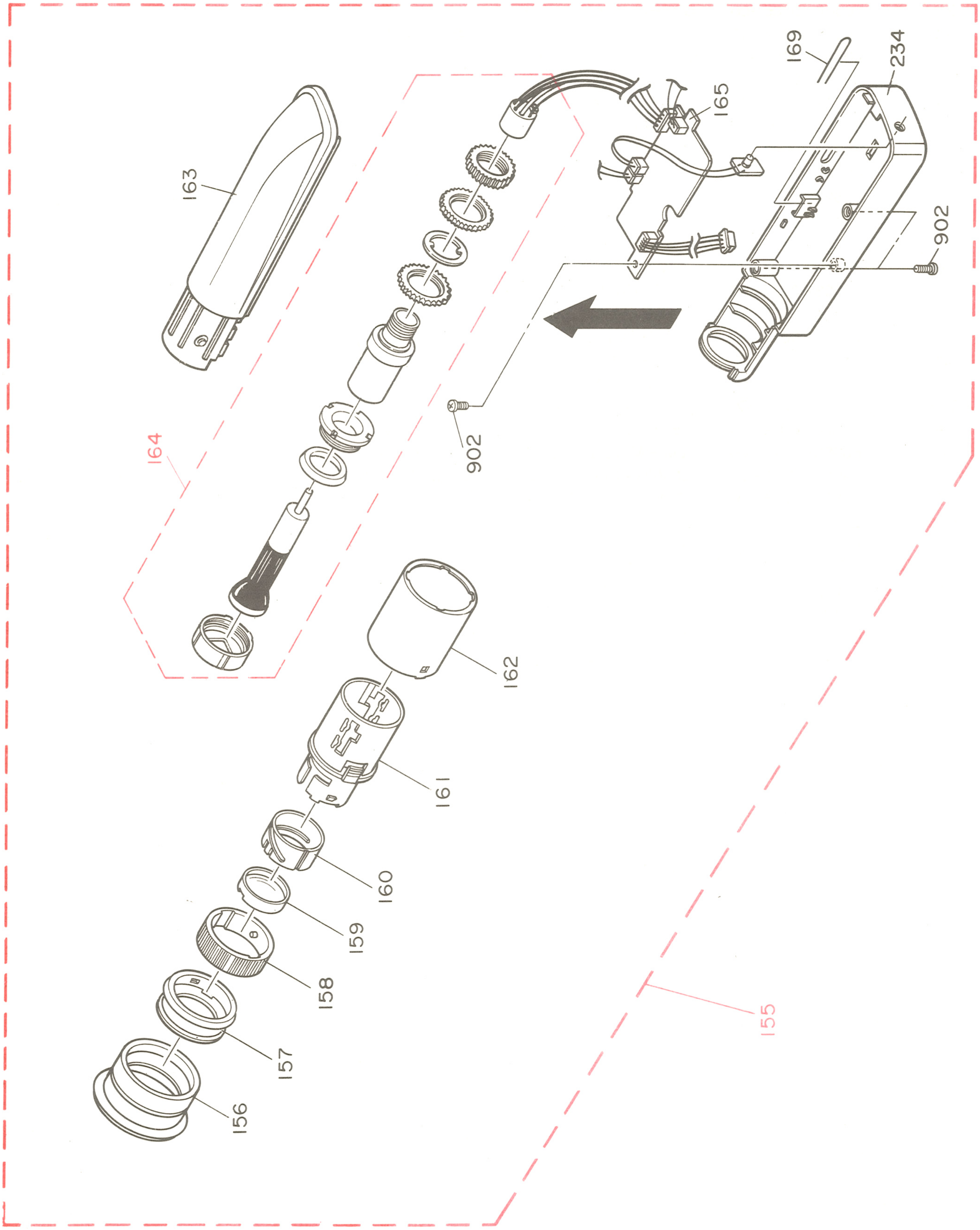
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
001	60504-0005-00	SCREW-BH;BH + M1.4 L2 WHT
006	60504-0016-00	SCREW;PH + FP M1.4 L3.5 S45C-HC BLK
023	60534-0006-00	WASHER-SLIT;PI0.95 OD2.5 T0.25
024	60534-0003-00	WASHER-SLIT;PI0.75 OD2.5 T0.2 POLYSLIDER
504	61533-0058-00	LEVER-CAM ASS'Y;DE-4
505	61534-0006-00	LEVER-EJECTOR;SUS304-CSP T0.3
507	63013-0090-00	BRKT-FRONT DECK;SUS304-CSP 0.4T
511	62202-0063-00	BASE-CAPSTAN ASS'Y;STS303/CS/STS304/WPB DE-4
512	66823-0022-00	MOTOR-CAPSTAN;DE-4
514	63083-0014-00	RAIL-MIDDLE R;DURACON M90-02 NAT
518	69063-213-990	ASSY-MOTOR LOADING;DE-4
524	66214-0007-00	SENSOR-DEW ASSY;A5052P T0.6 D87-3
527	63033-0027-00	POLE-BASE SUB IMP(ASSY ;DE-4
534	63354-0029-00	GUIDE-MODE SW;SUS304-CSP T0.3
538	61473-0012-00	GEAR-PULLEY ASSY;DE-3
539	61493-0006-00	BELT-TIMMING;L137 T0.4 POLYURETHAN
540	61473-0010-00	GEAR-CAPSTAN ASSY;PA-SBK 1218
543	61533-0051-00	LEVER-CAM P ASS'Y;DE-4
544	61473-0009-00	GEAR-CAM PINCH;SUS304-CSP T0.8
547	63083-0013-00	RAIL-MIDDLE L;DURACON M90-02 NAT
550	63313-0030-00	COVER-TIME BELT;DURACON M90-02 NAT
553	61534-0056-00	LEVER-CAM TENS ASS'Y;DE-4
556	61474-0004-00	GEAR-LOADING B;BERIC
557	61474-0003-00	GEAR-LOADING A;BERIC
559	61473-0005-00	GEAR-CAM TENSION;BERIC
562	66202-0012-00	SWITCH-MODE ASS'Y;SRZZOA083A DE-4
565	61472-0008-00	GEAR-CAM MAIN;SUS304-CSP T1.0
568	61524-0003-00	ROLLER-CAM MAIN;SUS303
569	60102-0023-00	PLATE-SLIDER ASS'Y;DE-4

7-7. E.V.F



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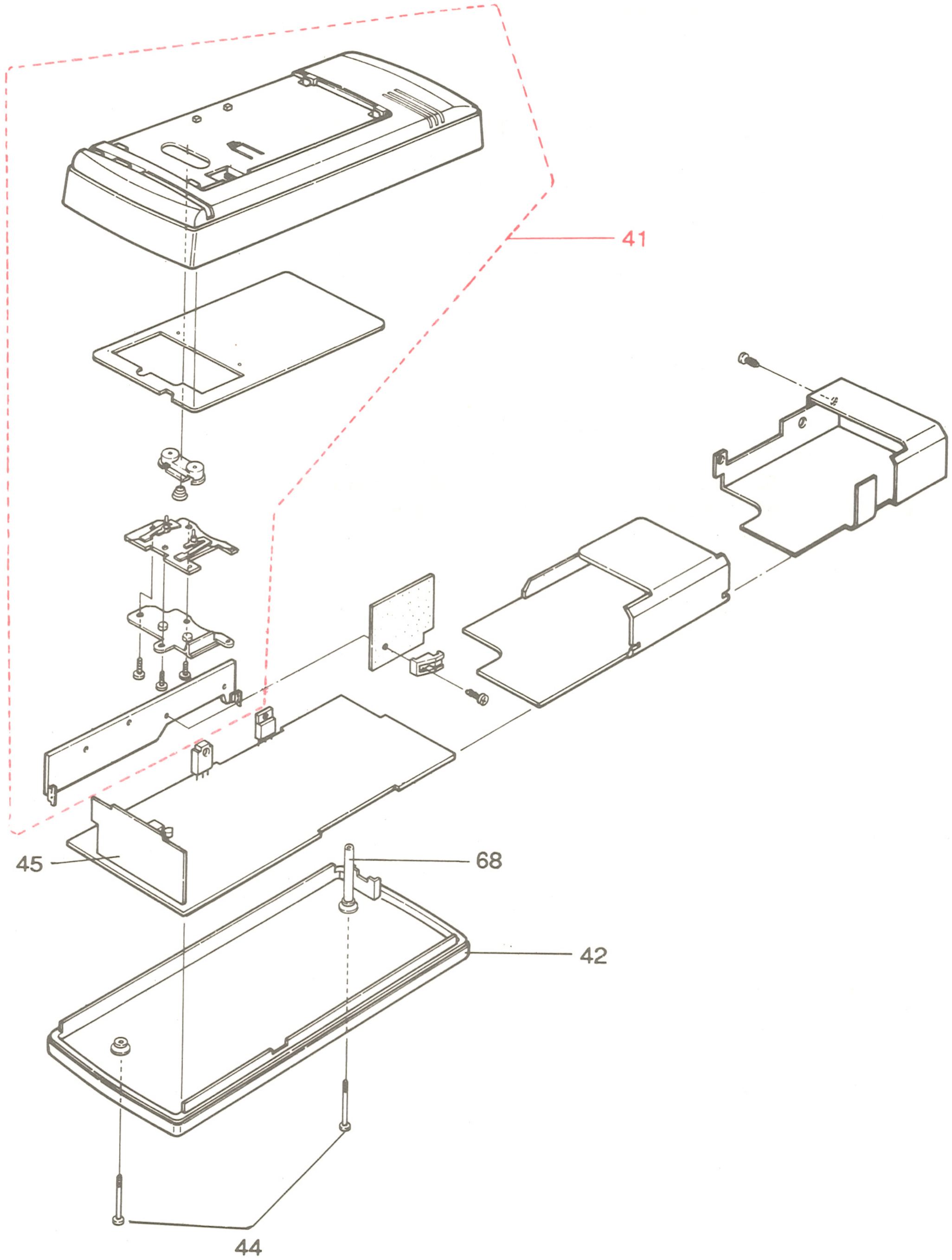
LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
155		ASSY EVF
	*EE-2-E405/P	VP-E405
	*EE-2-E405/SEG	VP-E405/SEG
	*EE-2-E405/QUE	VP-E405/QUE (VKR4630)
156	63354-0040-00	GUIDE-EYE CUP;SILICON T1 BLK VN-E405
157	63324-0066-00	HOLDER-EYE CUP;ABS94HB T1 BLK VN-E405
158	61644-0019-00	SLIDER-RING EYE LENS;ABS94HB T1.2 BLK VN-E405
159	66463-605-910	LENS EVF;PMMA CLR
160	63324-0067-00	HOLDER-EYE LENS;ABS94HB T1 BLK VN-E405
161	63352-0039-00	GUIDE-EYE LENS;POM T1 BLK VN-E405
162	62034-0055-00	COVER-EYE LENS;ALP T0.3 BLK VN-E405
163		CASE-LEFT EVF
	62032-0054-02	VP-E405
	62032-0054-03	VP-E405/QUE (VKR4630)
165	69063-213-722	ASSY EVF BOARD;VN-E405 NTSC
169	66614-642-610	EVF LOCK-SPRING;SUS304-WPB PI0.8
234	62032-0053-02	CASE-RIGHT EVF;ABS94HB T1.5 BLK VP-E405
902	67128-522-240	SCREW-TAP TITE BH;2X4 FE FZB

7-8. Adaptor



LOCA.NO	PART-NUMBER	DESCRIPTION;SPECIFICATION
41		ASSY CASE TOP;AA–E1P CASE TOP
	69063–213–495	VP–E405
	69063–213–638	VP–E405/QUE (VKR4630)
42	66032–603–110	CASE–BOTTOM;ABS 94V0
44	60504–0053–00	SCREW–TAP TITE;PWH + TB M3 L25 SWRCH10A BLK
45	69063–213–943	ASSY SUB 1 BOARD;AA–E1 NTSC/PAL
68	67354–600–810	RING–GUIDE;ABS 94V0

8. BLOCK DIAGRAMS

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8-7. Audio -------------------------- 8-7

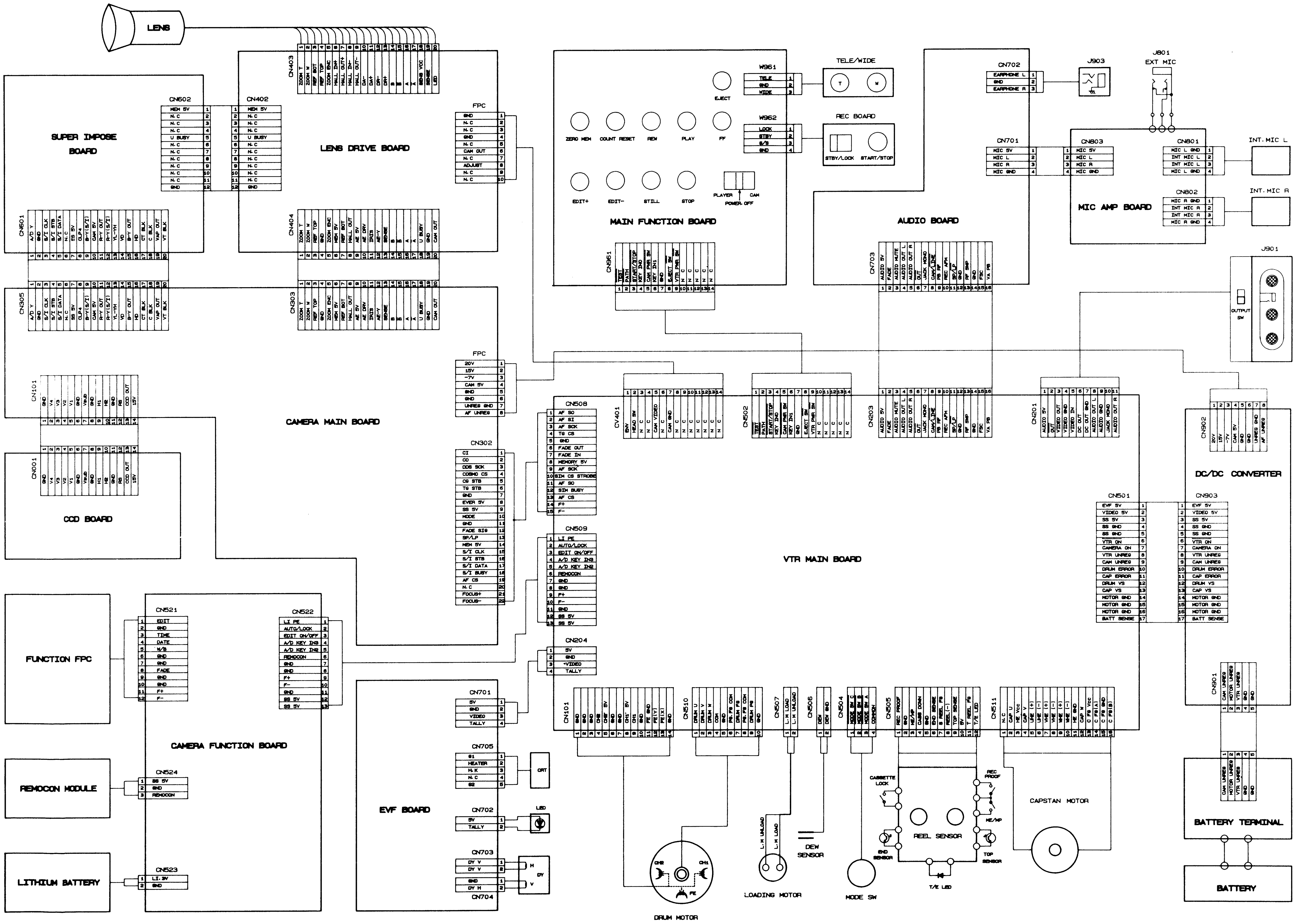
8-8. Drive --------------------------- 8-8

8-9. Process ------------------------- 8-9

8-10. Auto Focus --------------------- 8-10

8-11. Super Impose ------------------- 8-11

8-1. Total Wiring Diagram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SUPER IMPOSE BOARD
LENS DRIVE BOARD
MAIN FUNCTION BOARD
AUDIO BOARD
MIC AMP BOARD
CAMERA MAIN BOARD
CCD BOARD
VTR MAIN BOARD
DC/DC CONVERTER
FUNCTION FPC
CAMERA FUNCTION BOARD
REMOCON MODULE
LITHIUM BATTERY
EVF BOARD
BATTERY TERMINAL
BATTERY
CN602
CN402
CN403
CN404
CN303
CN501
CN305
CN101
CN001
FPC
CN302
CN508
CN509
CN204
W961
W962
TELE/WIDE
REC BOARD
STBY/LOCK
START/STOP
EJECT
ZERO MEM
COUNT RESET
REW
PLAY
FF
EDIT+
EDIT-
STILL
STOP
PLAYER
CAM
POWER OFF
CN961
CN702
CN701
CN703
J903
J801
EXT MIC
CN803
CN801
CN802
INT. MIC L
INT. MIC R
J901
OUTPUT SW
VIDEO OUT
RFU DC OUT
AUDIO L OUT
AUDIO R OUT
CV401
CN502
CN203
CN201
CN902
CN903
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CN522
CN524
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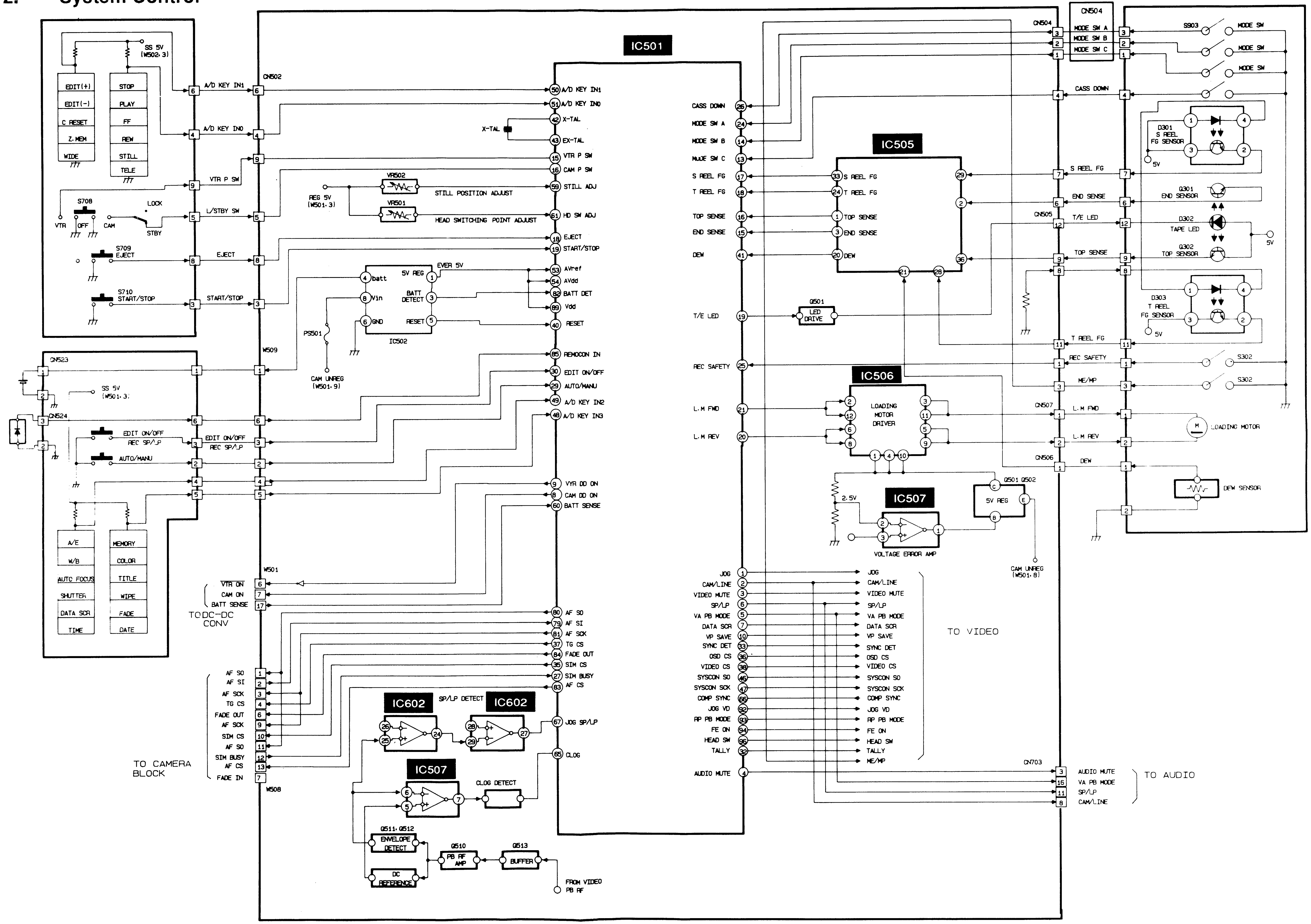
CN701
CN705
CN702
CN703
CN704
CRT
LED
DY
H
V
CN101
CN510
CN507
CN506
CN504
CN505
CN511
CASSETTE LOCK
REC PROOF
ME/MP
REEL SENSOR
END SENSOR
TOP SENSOR
T/E LED
CAPSTAN MOTOR
DEW SENSOR
LOADING MOTOR
MODE SW
DRUM MOTOR
CH1
CH2
PG
L.M LOAD
L.M UNLOAD

8-2. System Control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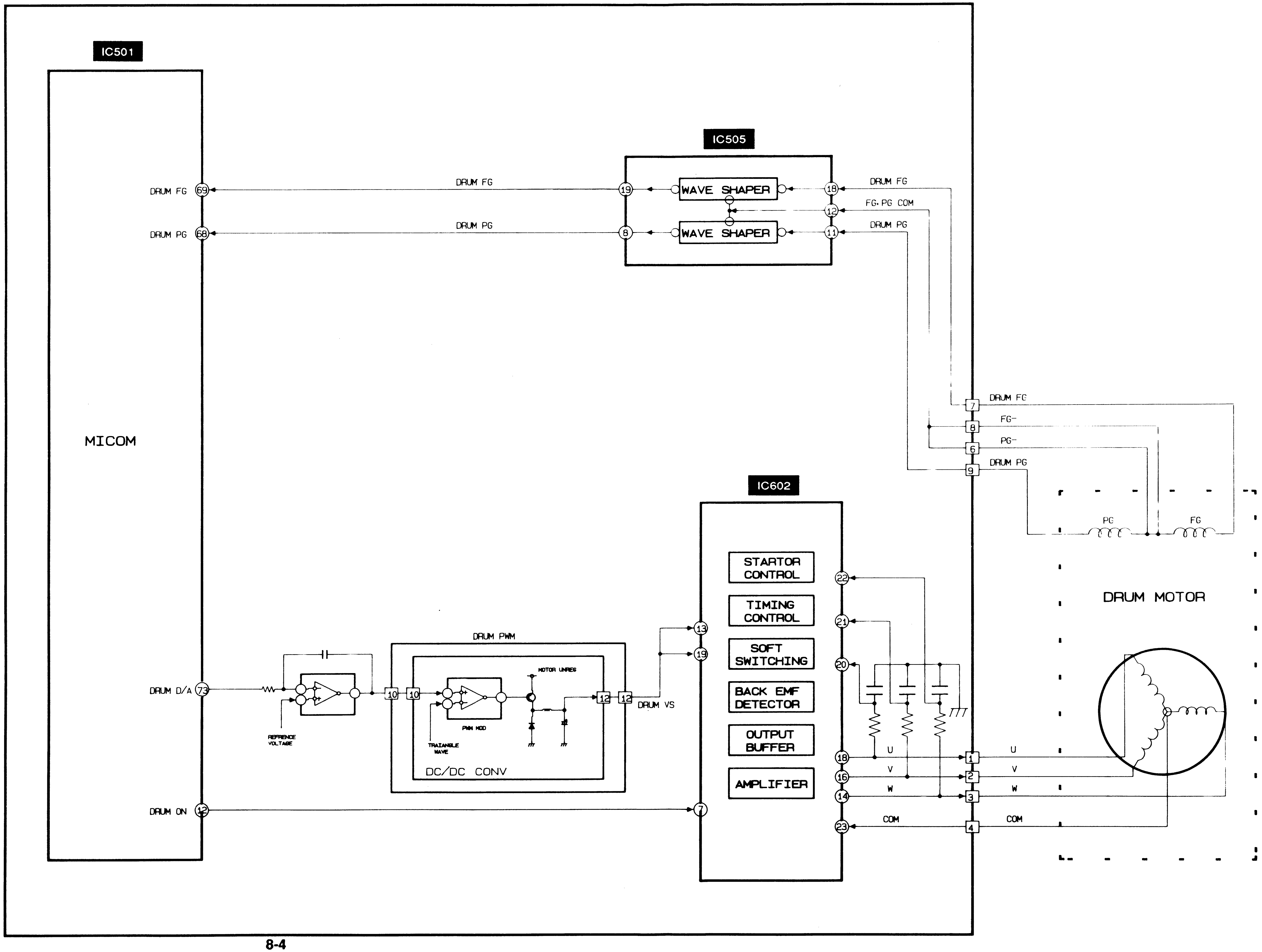
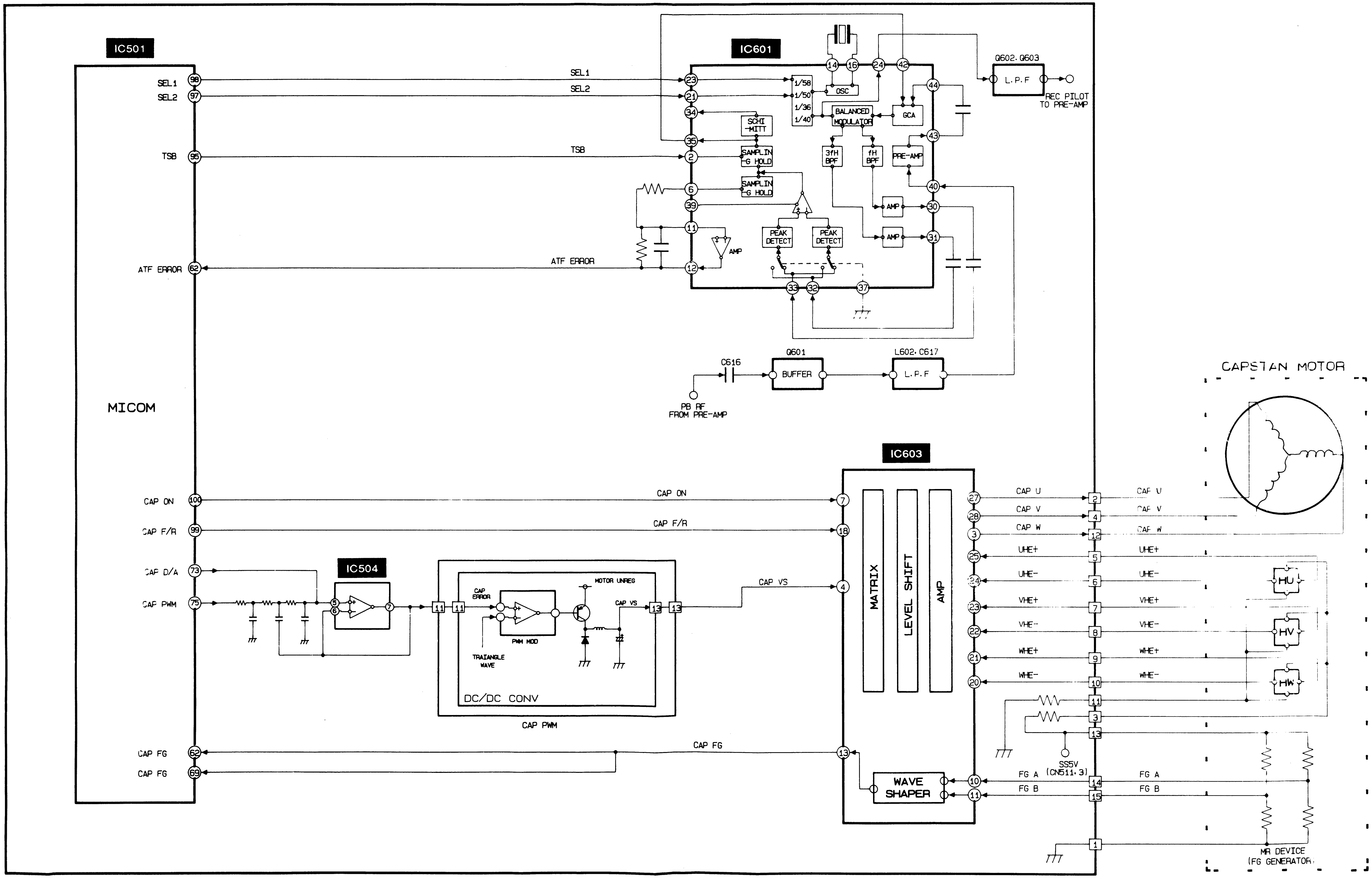
C RESET
Z.MEM
WIDE
STOP
PLAY
FF
REW
STILL
TELE
A/D KEY IN1
A/D KEY IN0
VTR P SW
L/STBY SW
EJECT
START/STOP
S708
LOCK
VTR
OFF
CAM
STBY
S709 EJECT
S710 START/STOP
X-TAL
EX-TAL
CAM P SW
STILL ADJ
HD SW ADJ
VR502
VR501
STILL POSITION ADJUST
HEAD SWITCHING POINT ADJUST
REG 5V (W501-3)
EVER 5V
5V REG
batt
Vin
GND
BATT DETECT
RESET
AVref
AVdd
BATT DET
Vdd
PS501
CAM UNREG (W501-9)
REMOCON IN
EDIT ON/OFF
AUTO/MANU
A/D KEY IN2
A/D KEY IN3
SS 5V (W501-3)
REC SP/LP
VTR DD ON
CAM DD ON
BATT SENSE
A/E
W/B
AUTO FOCUS
SHUTTER
DATA SCR
TIME
MEMORY
COLOR
TITLE
WIPE
FADE
DATE
VTR ON
CAM ON
TO DC-DC CONV
AF SO
AF SI
AF SCK
TG CS
FADE OUT
SIM CS
SIM BUSY
AF CS
FADE IN
TO CAMERA BLOCK
SP/LP DETECT
JOG SP/LP
CLOG
CLOG DETECT
Q511, Q512 ENVELOPE DETECT
DC REFERENCE
Q510 PB RF AMP
Q513 BUFFER
FROM VIDEO PB RF
CASS DOWN
MODE SW A
MODE SW B
MODE SW C
S REEL FG
T REEL FG
TOP SENSE
END SENSE
DEW
T/E LED
Q501 LED DRIVE
REC SAFETY
L.M FWD
L.M REV
LOADING MOTOR DRIVER
2.5V
VOLTAGE ERROR AMP
Q501 Q502 5V REG
CAM UNREG (W501-8)
JOG
CAM/LINE
VIDEO MUTE
SP/LP
VA PB MODE
VP SAVE
SYNC DET
OSD CS
VIDEO CS
SYSCON SO
SYSCON SCK
COMP SYNC
JOG VD
RP PB MODE
FE ON
HEAD SW
TALLY
ME/MP
TO VIDEO
AUDIO MUTE
TO AUDIO
S903
MODE SW
D301 S REEL FG SENSOR
Q301 END SENSOR
D302 TAPE LED
Q302 TOP SENSOR
D303 T REEL FG SENSOR
5V
S302
LOADING MOTOR
DEW SENSOR

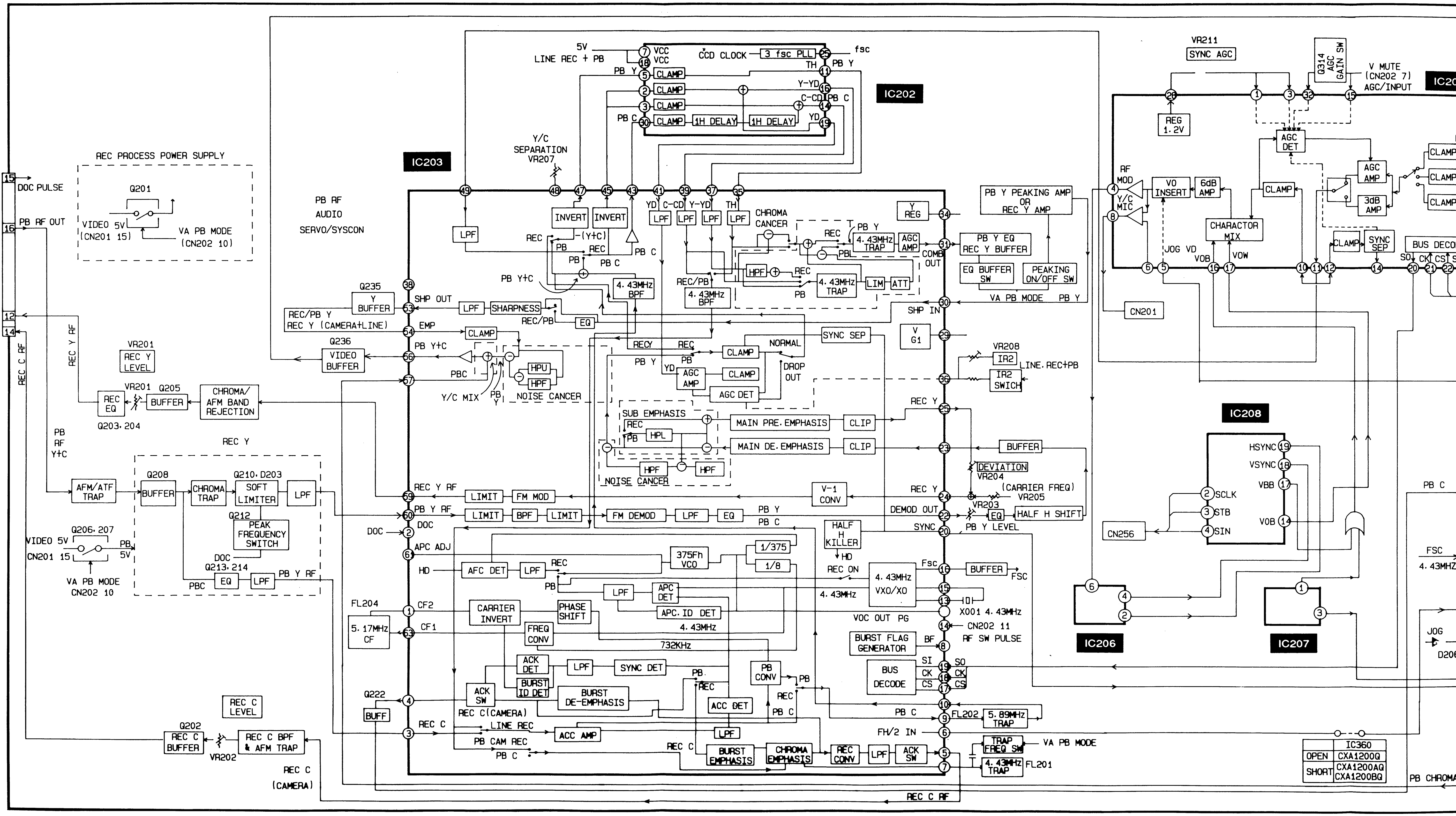
8-3. Servo Drum Control

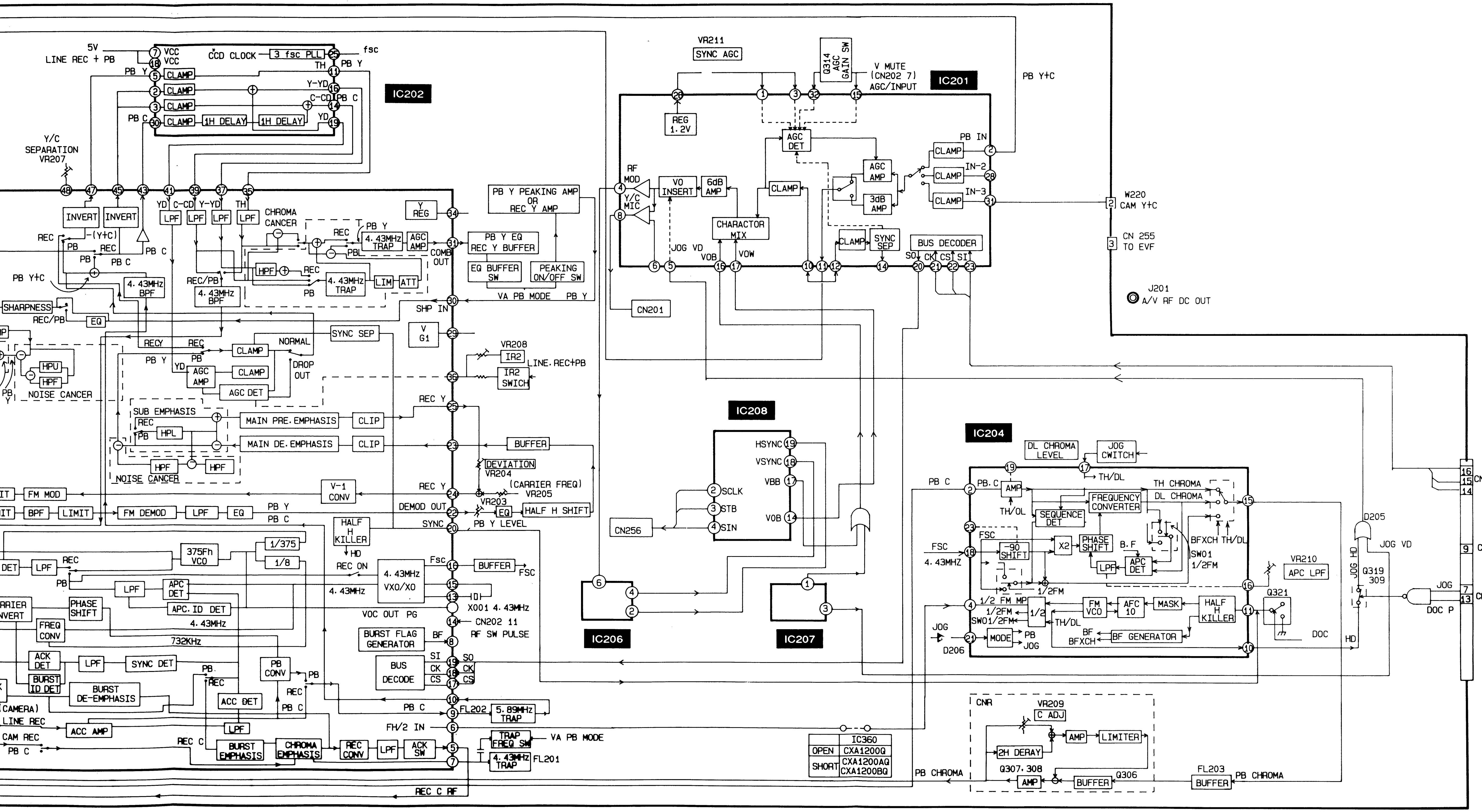

IC501
MICOM
DRUM FG 69
DRUM PG 68
DRUM D/A 73
DRUM ON 12
IC505
WAVE SHAPER
WAVE SHAPER
DRUM FG
DRUM PG
19
8
18
12
11
DRUM FG
FG·PG COM
DRUM PG
DRUM PWM
REFRENCE VOLTAGE
10
10
PWM MOD
TRAIANGLE WAVE
MOTOR UNREG
12
12
DC/DC CONV
DRUM VS
IC602
STARTOR CONTROL
TIMING CONTROL
SOFT SWITCHING
BACK EMF DETECTOR
OUTPUT BUFFER
AMPLIFIER
13
19
7
22
21
20
18
16
14
23
U
V
W
COM
7 DRUM FG
8 FG-
6 PG-
9 DRUM PG
1 U
2 V
3 W
4 COM
PG
FG
DRUM MOTOR

8-4. Servo Capstan Control

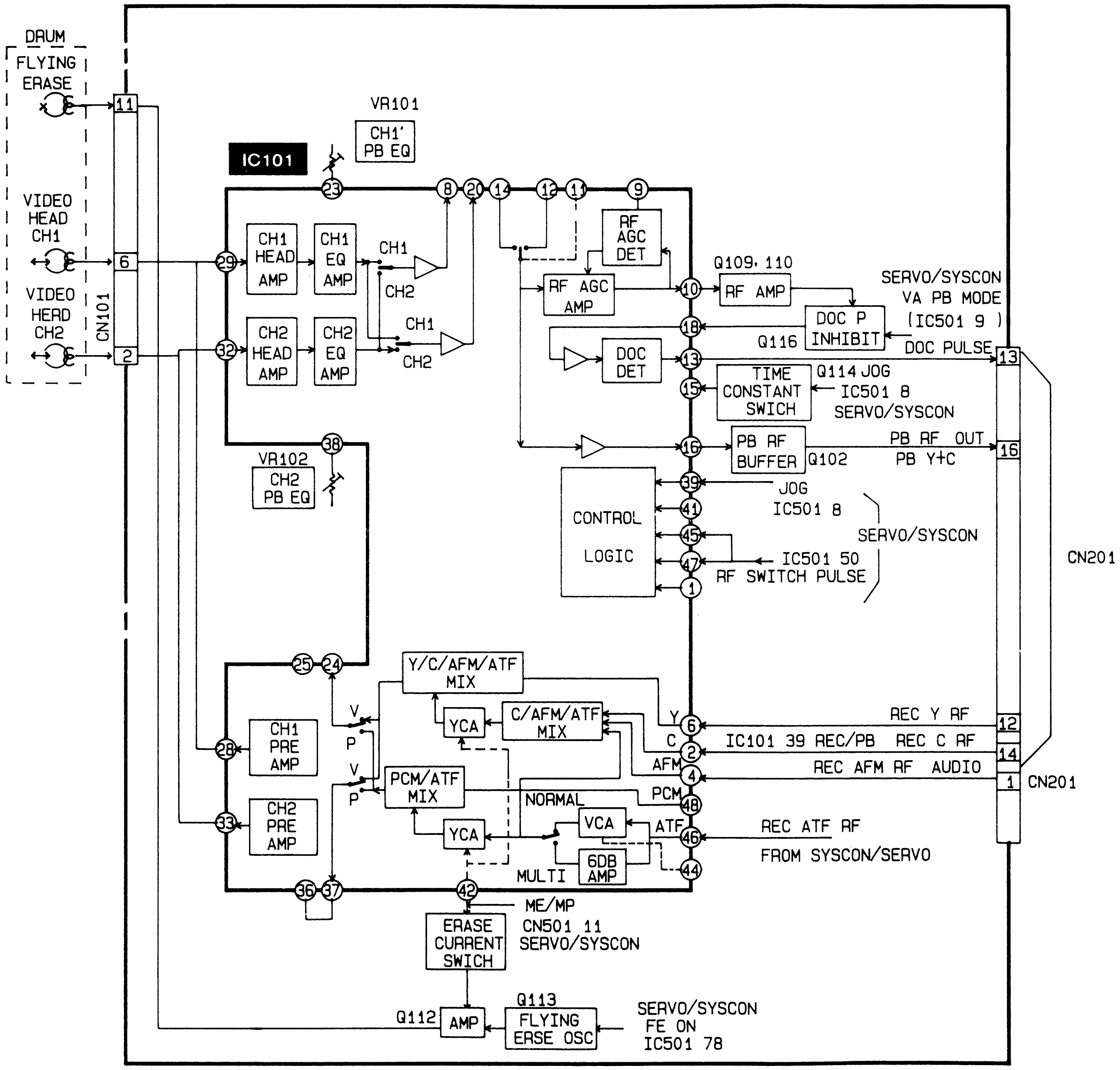

IC501
MICOM
SEL1
SEL2
TSB
ATF ERROR
CAP ON
CAP F/R
CAP D/A
CAP PWM
CAP FG
CAP FG
IC601
1/58
1/50
1/36
1/40
OSC
BALANCED MODULATOR
GCA
SCHI-MITT
SAMPLIN-G HOLD
SAMPLIN-G HOLD
3fH BPF
fH BPF
PRE-AMP
AMP
AMP
AMP
PEAK DETECT
PEAK DETECT
Q602, Q603
L.P.F
REC PILOT TO PRE-AMP
C616
Q601
BUFFER
L602, C617
L.P.F
PB RF FROM PRE-AMP
IC504
CAP ERROR
MOTOR UNREG
CAP VS
PWM MOD
TRAIANGLE WAVE
DC/DC CONV
CAP PWM
CAP VS
IC603
MATRIX
LEVEL SHIFT
AMP
WAVE SHAPER
CAP U
CAP V
CAP W
UHE+
UHE-
VHE+
VHE-
WHE+
WHE-
FG A
FG B
SS5V (CN511, 3)
CAPSTAN MOTOR
HU
HV
HW
MR DEVICE (FG GENERATOR)

8-5. Video

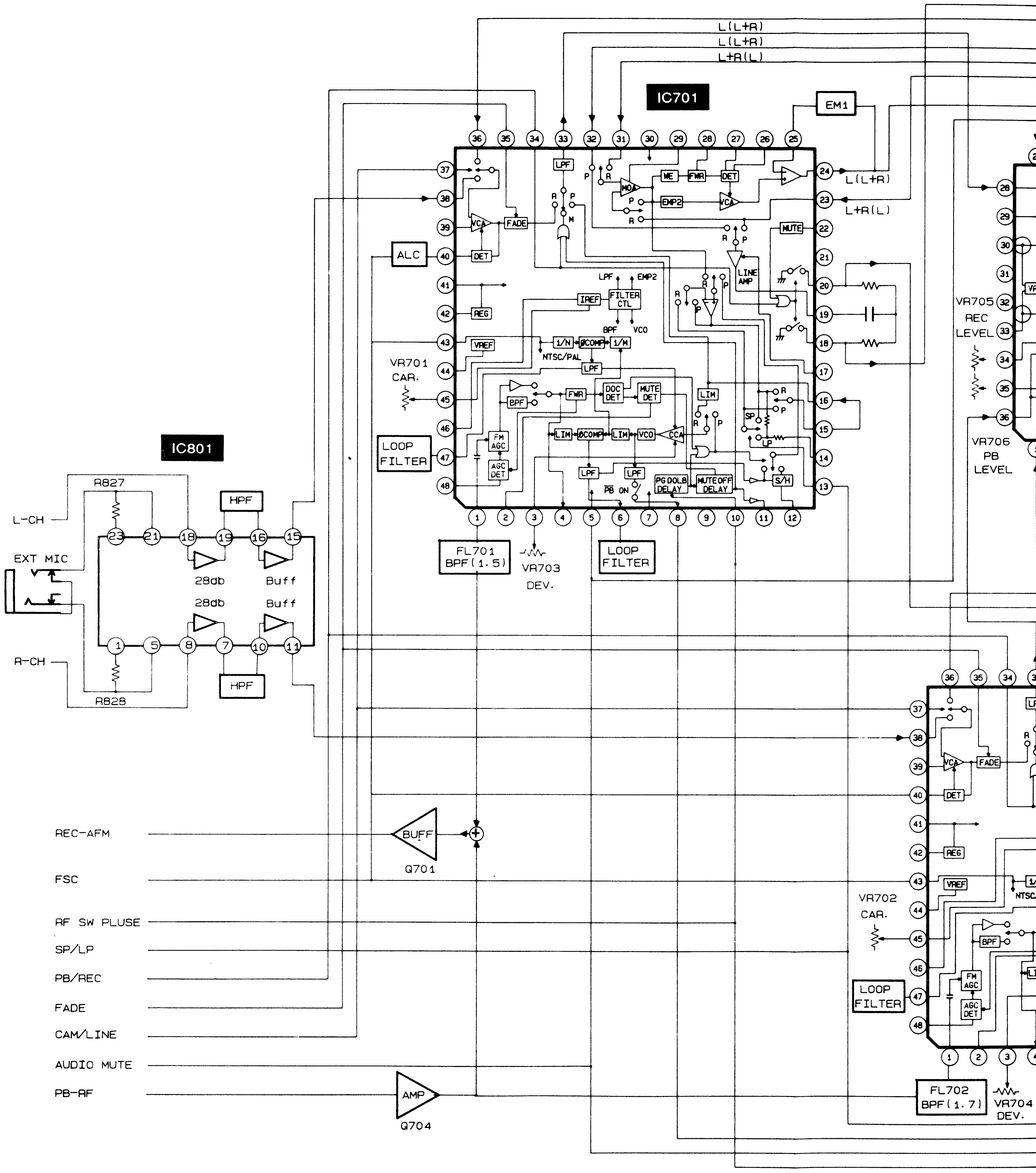

CN201
DOC PULSE
PB RF OUT
REC C RF
REC Y RF
REC PROCESS POWER SUPPLY
Q201
VIDEO 5V
(CN201 15)
VA PB MODE
(CN202 10)
PB RF
AUDIO
SERVO/SYSCON
IC203
IC202
5V
LINE REC + PB
VCC
CCD CLOCK
3 fsc PLL
fsc
TH
PB Y
CLAMP
Y-YD
C-CD
PB C
1H DELAY
YD
Y/C SEPARATION VR207
LPF
INVERT
REC
PB
-(Y+C)
YD C-CD Y-YD TH
CHROMA CANCER
4.43MHz TRAP
AGC AMP
Y REG
HPF
4.43MHz BPF
REC/PB
LIM
ATT
COMB OUT
PB Y PEAKING AMP OR REC Y AMP
PB Y EQ REC Y BUFFER
EQ BUFFER SW
PEAKING ON/OFF SW
VA PB MODE
PB Y+C
Q235
Y BUFFER
SHP OUT
SHARPNESS
SHP IN
REC/PB Y
REC Y (CAMERA+LINE)
EMP
EQ
Q236
VIDEO BUFFER
PB Y+C
HPU
PBC
Y/C MIX
NOISE CANCER
V G1
RECY
NORMAL
SYNC SEP
DROP OUT
AGC DET
VR208
IR2
LINE. REC+PB
IR2 SWICH
VR201
REC Y LEVEL
VR201 Q205
REC EQ
BUFFER
CHROMA/ AFM BAND REJECTION
Q203. 204
SUB EMPHASIS
HPL
MAIN PRE. EMPHASIS
MAIN DE. EMPHASIS
CLIP
REC Y
DEVIATION VR204
(CARRIER FREQ) VR205
VR203
HALF H SHIFT
PB RF Y+C
AFM/ATF TRAP
Q208
CHROMA TRAP
Q210. D203
SOFT LIMITER
Q212
PEAK FREQUENCY SWITCH
REC Y RF
PB Y RF
LIMIT
FM MOD
BPF
FM DEMOD
V-1 CONV
DEMOD OUT
PB Y LEVEL
DOC
SYNC
HALF H KILLER
APC ADJ
375Fh VCO
1/375
1/8
HD
AFC DET
REC ON
Fsc
4.43MHz VXO/XO
FSC
APC DET
APC. ID DET
4.43MHz
X001 4.43MHz
Q206. 207
VIDEO 5V
CN201 15
PB 5V
VA PB MODE CN202 10
Q213. 214
PBC
FL204
CF2
CARRIER INVERT
PHASE SHIFT
VOC OUT PG
CN202 11
5.17MHz CF
CF1
FREQ CONV
732KHz
BURST FLAG GENERATOR
BF
RF SW PULSE
ACK DET
SYNC DET
PB CONV
BUS DECODE
SI CK CS
SO CK CS
BURST ID DET
Q222
BUFF
ACK SW
BURST DE-EMPHASIS
REC C(CAMERA)
ACC DET
REC C LEVEL
LINE REC
ACC AMP
FL202
5.89MHz TRAP
FH/2 IN
Q202
REC C BUFFER
REC C BPF & AFM TRAP
VR202
PB CAM REC
BURST EMPHASIS
CHROMA EMPHASIS
REC CONV
TRAP FREQ SW
4.43MHz TRAP
FL201
REC C (CAMERA)
REC C RF
VR211
SYNC AGC
Q314 AGC GAIN SW
V MUTE (CN202 7) AGC/INPUT
IC20
REG 1.2V
AGC DET
RF MOD
Y/C MIC
VO INSERT
6dB AMP
CHARACTOR MIX
AGC AMP
3dB AMP
SYNC SEP
BUS DECO
JOG VD
VOB
VOW
CN201
IC208
HSYNC
VSYNC
VBB
VOB
SCLK
STB
SIN
CN256
IC206
IC207
PB C
FSC 4.43MHZ
JOG
D20
PB CHROMA
IC360
OPEN CXA1200Q
SHORT CXA1200AQ CXA1200BQ


IC202
5V
LINE REC + PB
VCC
CCD CLOCK
3 fsc PLL
fsc
PB Y
TH
CLAMP
Y-YD
C-CD
PB C
YD
1H DELAY
Y/C
SEPARATION
VR207
INVERT
REC
-(Y+C)
PB
PB Y+C
4.43MHz
BPF
SHARPNESS
REC/PB
EQ
LPF
CHROMA
CANCER
4.43MHz
TRAP
AGC
AMP
HPF
LIM
ATT
COMB
OUT
Y
REG
PB Y PEAKING AMP
OR
REC Y AMP
PB Y EQ
REC Y BUFFER
EQ BUFFER
SW
PEAKING
ON/OFF SW
VA PB MODE
SHP IN
SYNC SEP
V
G1
RECY
NORMAL
DROP
OUT
AGC DET
HPU
NOISE CANCER
VR208
IR2
LINE.REC+PB
IR2
SWICH
REC Y
SUB EMPHASIS
HPL
MAIN PRE.EMPHASIS
MAIN DE.EMPHASIS
CLIP
BUFFER
DEVIATION
VR204
(CARRIER FREQ)
VR205
V-1
CONV
FM MOD
BPF
LIMIT
FM DEMOD
DEMOD OUT
VR203
HALF H SHIFT
PB Y LEVEL
SYNC
HALF
H
KILLER
HD
375Fh
VCO
1/375
1/8
DET
REC ON
4.43MHz
VXO/XO
Fsc
FSC
APC
DET
APC.ID DET
X001 4.43MHz
VOC OUT PG
CN202 11
RF SW PULSE
PHASE
SHIFT
FREQ
CONV
732KHz
BURST FLAG
GENERATOR
BF
ACK
DET
SYNC DET
PB
CONV
BUS
DECODE
SI
SO
CK
CS
BURST
ID DET
BURST
DE-EMPHASIS
ACC DET
FL202
5.89MHz
TRAP
(CAMERA)
LINE REC
ACC AMP
FH/2 IN
CAM REC
REC C
BURST
EMPHASIS
CHROMA
EMPHASIS
REC
CONV
ACK
SW
TRAP
FREQ SW
4.43MHz
TRAP
FL201
REC C RF
VR211
SYNC AGC
Q314
AGC
GAIN SW
V MUTE
(CN202 7)
AGC/INPUT
IC201
PB Y+C
REG
1.2V
DET
PB IN
IN-2
IN-3
RF
MOD
Y/C
MIC
VO
INSERT
6dB
AMP
3dB
AMP
CHARACTOR
MIX
JOG VD
VOB
VOW
BUS DECODER
SO
CK
CS
SI
W220
CAM Y+C
CN 255
TO EVF
J201
A/V RF DC OUT
CN201
IC208
HSYNC
VSYNC
VBB
SCLK
STB
SIN
CN256
IC206
IC207
IC204
DL CHROMA
LEVEL
JOG
CWITCH
TH/DL
PB. C
AMP
TH CHROMA
DL CHROMA
FREQUENCY
CONVERTER
SEQUENCE
DET
-90
SHIFT
X2
PHASE
SHIFT
B.F
APC
DET
BFXCH
SW01
1/2FM
VR210
APC LPF
1/2 FM MP
1/2FM
SW01/2FM
1/2
FM
VCO
AFC
10
MASK
HALF
H
KILLER
Q321
MODE
JOG
BF GENERATOR
DOC
D206
D205
JOG HD
Q319
309
JOG VD
DOC P
HD
CN202
CN201
IC360
OPEN
CXA1200Q
SHORT
CXA1200AQ
CXA1200BQ
CNR
VR209
C ADJ
2H DERAY
LIMITER
Q307.308
BUFFER
Q306
FL203
PB CHROMA

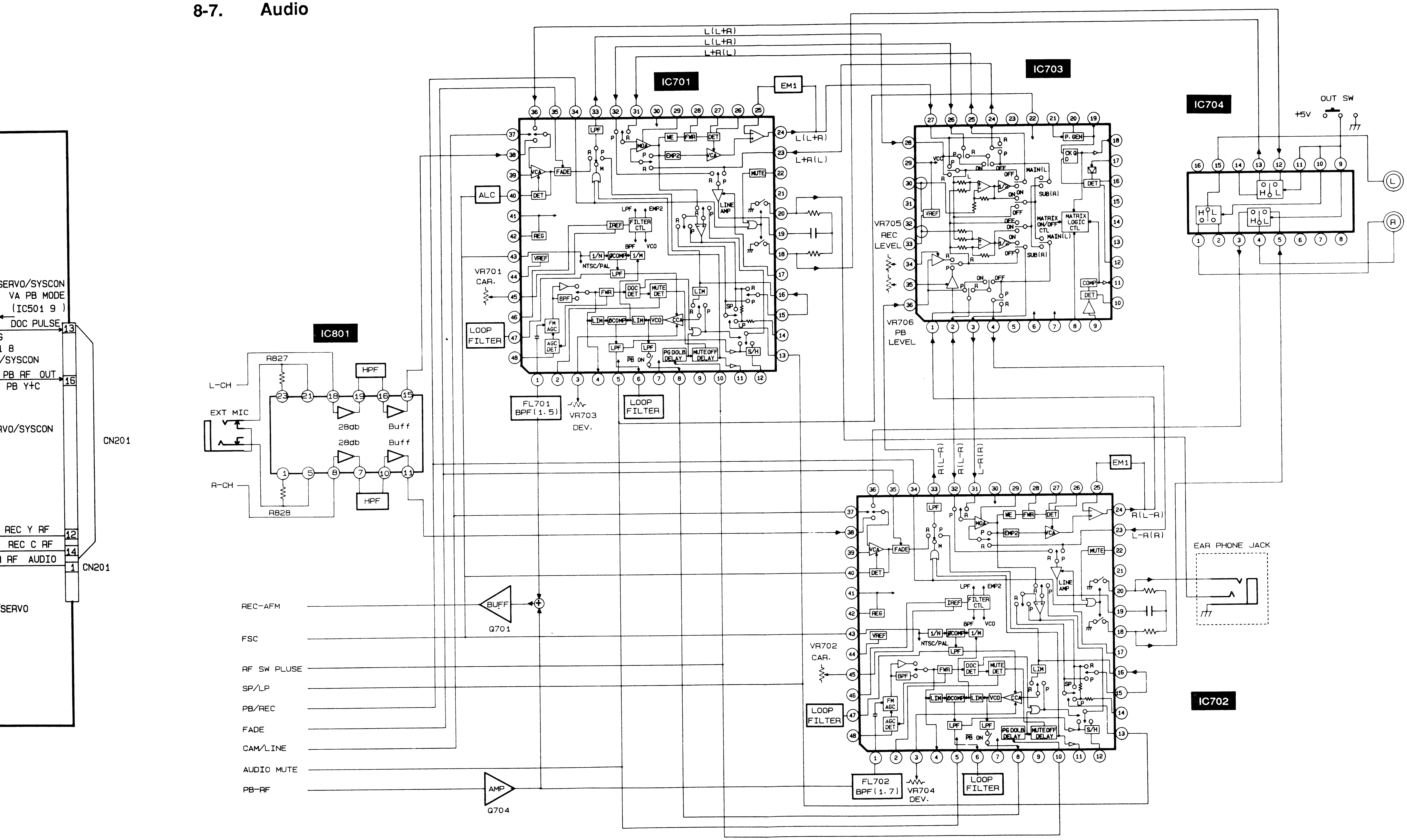
8-6. Pre-Amp


DRUM
FLYING ERASE
VIDEO HEAD CH1
VIDEO HEAD CH2
CN101
IC101
VR101
CH1' PB EQ
CH1 HEAD AMP
CH1 EQ AMP
CH2 HEAD AMP
CH2 EQ AMP
CH1
CH2
RF AGC DET
RF AGC AMP
Q109, 110
RF AMP
SERVO/SYSCON
VA PB MODE
(IC501 9)
DOC P INHIBIT
Q116
DOC PULSE
DOC DET
TIME CONSTANT SWICH
Q114 JOG
IC501 8
SERVO/SYSCON
PB RF BUFFER
Q102
PB RF OUT
PB Y+C
VR102
CH2 PB EQ
CONTROL LOGIC
JOG
IC501 8
SERVO/SYSCON
IC501 50
RF SWITCH PULSE
CN201
Y/C/AFM/ATF MIX
CH1 PRE AMP
CH2 PRE AMP
YCA
C/AFM/ATF MIX
PCM/ATF MIX
YCA
NORMAL
VCA
6DB AMP
MULTI
REC Y RF
IC101 39 REC/PB
REC C RF
REC AFM RF AUDIO
REC ATF RF
FROM SYSCON/SERVO
ME/MP
CN501 11
SERVO/SYSCON
ERASE CURRENT SWICH
Q112
AMP
Q113
FLYING ERSE OSC
SERVO/SYSCON
FE ON
IC501 78

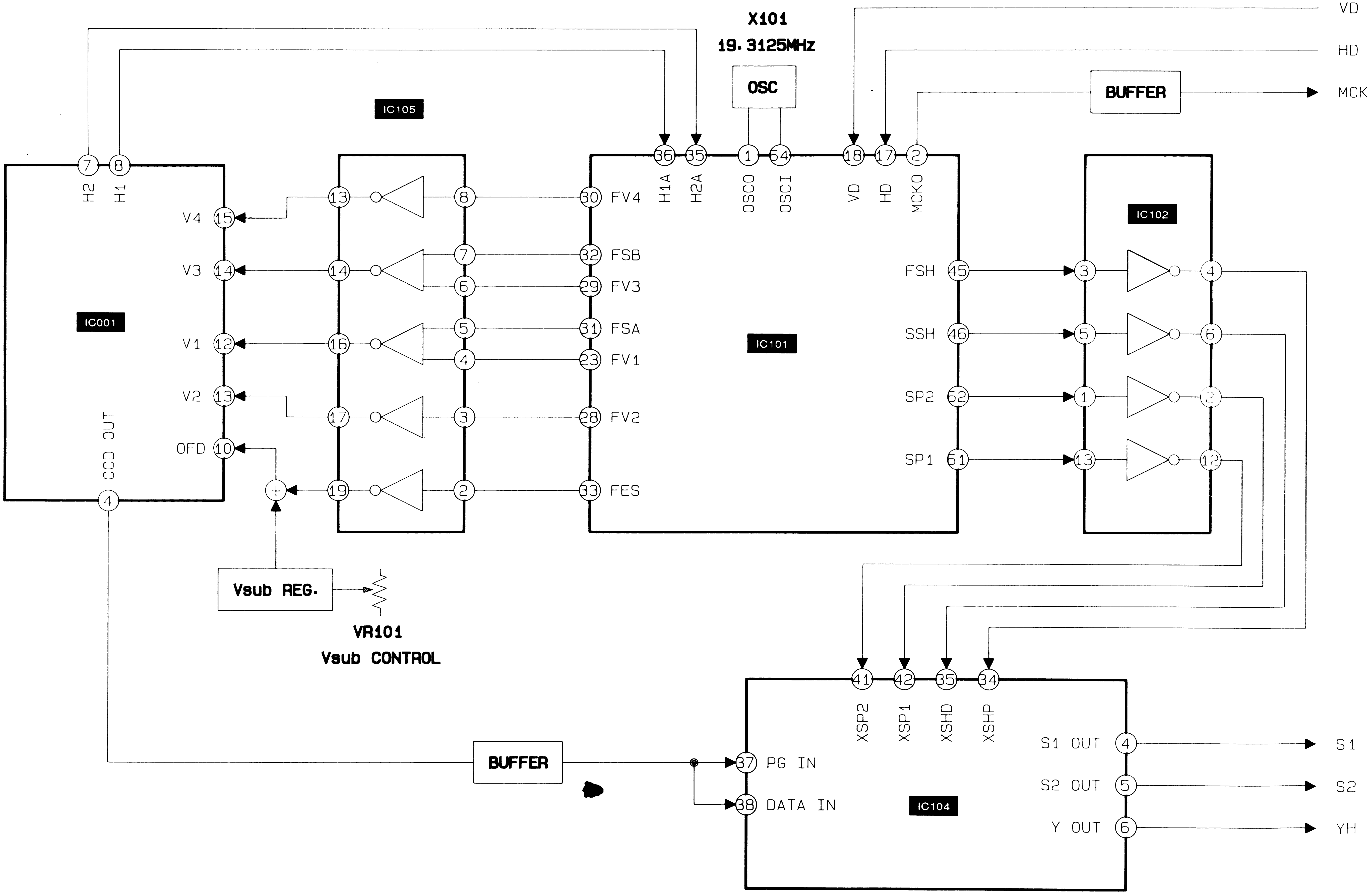
8-7. Audio


L(L+R)
L(L+R)
L+R(L)
IC701
EM1
L(L+R)
L+R(L)
ALC
VR701 CAR.
LOOP FILTER
FL701 BPF(1.5)
VR703 DEV.
LOOP FILTER
VR705 REC LEVEL
VR706 PB LEVEL
IC801
R827
R828
HPF
HPF
28db
28db
Buff
Buff
L-CH
EXT MIC
R-CH
REC-AFM
FSC
RF SW PLUSE
SP/LP
PB/REC
FADE
CAM/LINE
AUDIO MUTE
PB-RF
BUFF
Q701
AMP
Q704
VR702 CAR.
LOOP FILTER
FL702 BPF(1.7)
VR704 DEV.
VCA
FADE
DET
REG
VREF
BPF
FWR
DOC DET
MUTE DET
LIM
DCOMP
VCO
CCA
FM AGC
AGC DET
LPF
PB ON
PG DOLB DELAY
MUTE OFF DELAY
S/H
IREF
FILTER CTL
1/N
NTSC/PAL
ME
EMP2
MUTE
LINE AMP
SP
LP

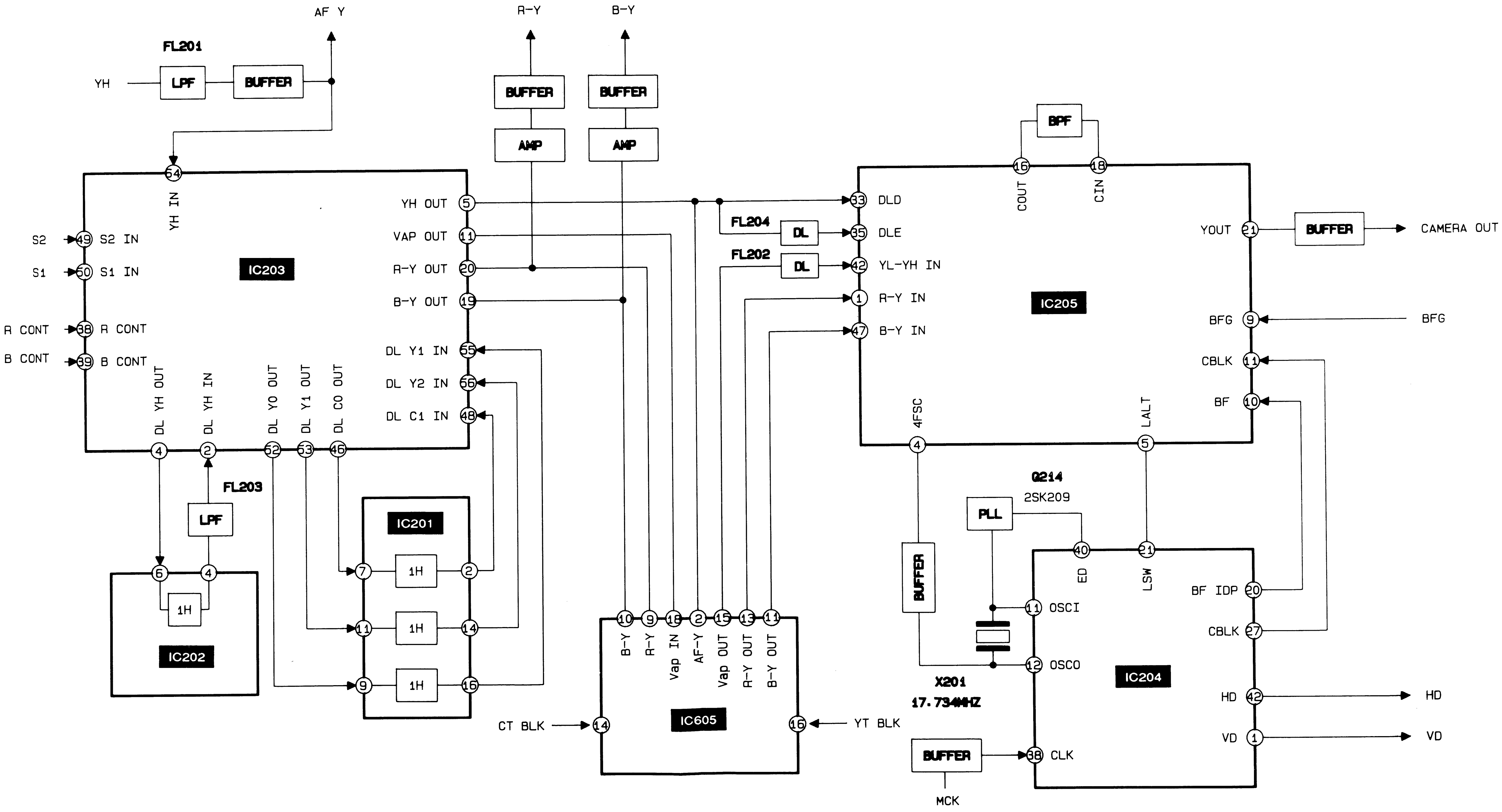
8-7. Audio


IC701
IC702
IC703
IC704
IC801
L(L+R)
L(L+R)
L+R(L)
L(L+R)
L+R(L)
R(L-R)
L-R(R)
R(L-R)
R(L-R)
L-R(R)
EM1
EM1
ALC
LOOP FILTER
LOOP FILTER
LOOP FILTER
LOOP FILTER
FL701 BPF(1.5)
FL702 BPF(1.7)
VR701 CAR.
VR702 CAR.
VR703 DEV.
VR704 DEV.
VR705 REC LEVEL
VR706 PB LEVEL
OUT SW
+5V
EAR PHONE JACK
L
R
SERVO/SYSCON
VA PB MODE
(IC501 9)
DOC PULSE
8
/SYSCON
PB RF OUT
PB Y+C
VO/SYSCON
CN201
REC Y RF
REC C RF
RF AUDIO
CN201
SERVO
L-CH
R-CH
EXT MIC
R827
R828
HPF
HPF
28db
28db
Buff
Buff
REC-AFM
FSC
RF SW PLUSE
SP/LP
PB/REC
FADE
CAM/LINE
AUDIO MUTE
PB-RF
BUFF
Q701
AMP
Q704
LPF
FADE
VCA
DET
REG
VREF
IREF
FILTER CTL
1/N
ØCOMP
1/M
NTSC/PAL
BPF
VCO
EMP2
FWR
DOC DET
MUTE DET
LIM
CCA
FM AGC
AGC DET
PG DOLBL DELAY
MUTE OFF DELAY
S/H
SP
LP
PB ON
MOA
WE
MUTE
LINE AMP
P.GEN
CK Q D
MAIN(L)
SUB(R)
MATRIX ON/OFF CTL
MATRIX LOGIC CTL
COMP
ON
OFF
H
L

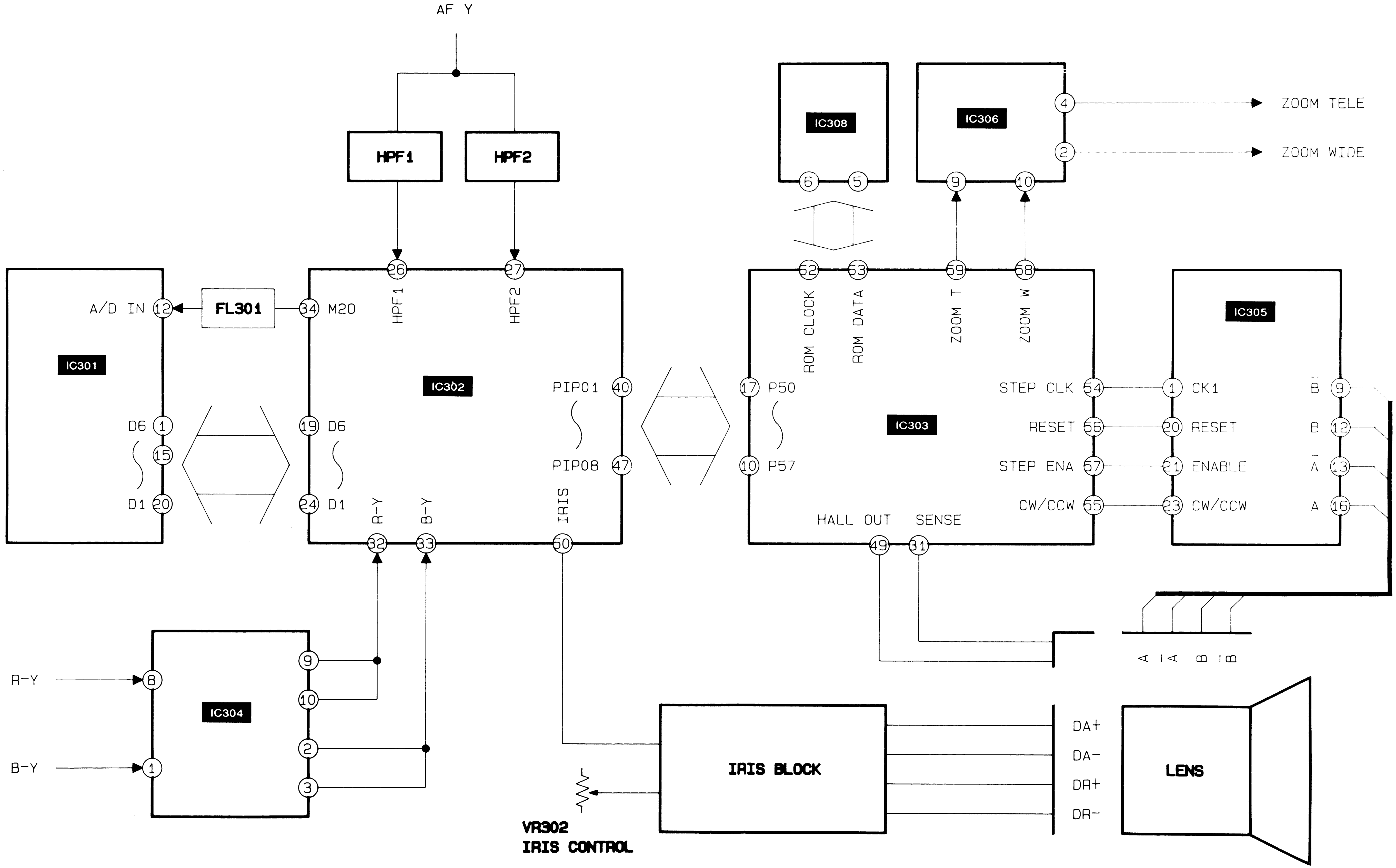
8-8. Drive


X101
19.3125MHz
OSC
VD
HD
BUFFER
MCK
IC105
IC001
H2
H1
V4
V3
V1
V2
OFD
CCD OUT
IC101
FV4
FSB
FV3
FSA
FV1
FV2
FES
H1A
H2A
OSCO
OSCI
VD
HD
MCKO
FSH
SSH
SP2
SP1
IC102
Vsub REG.
VR101
Vsub CONTROL
BUFFER
IC104
XSP2
XSP1
XSHD
XSHP
PG IN
DATA IN
S1 OUT
S2 OUT
Y OUT
S1
S2
YH

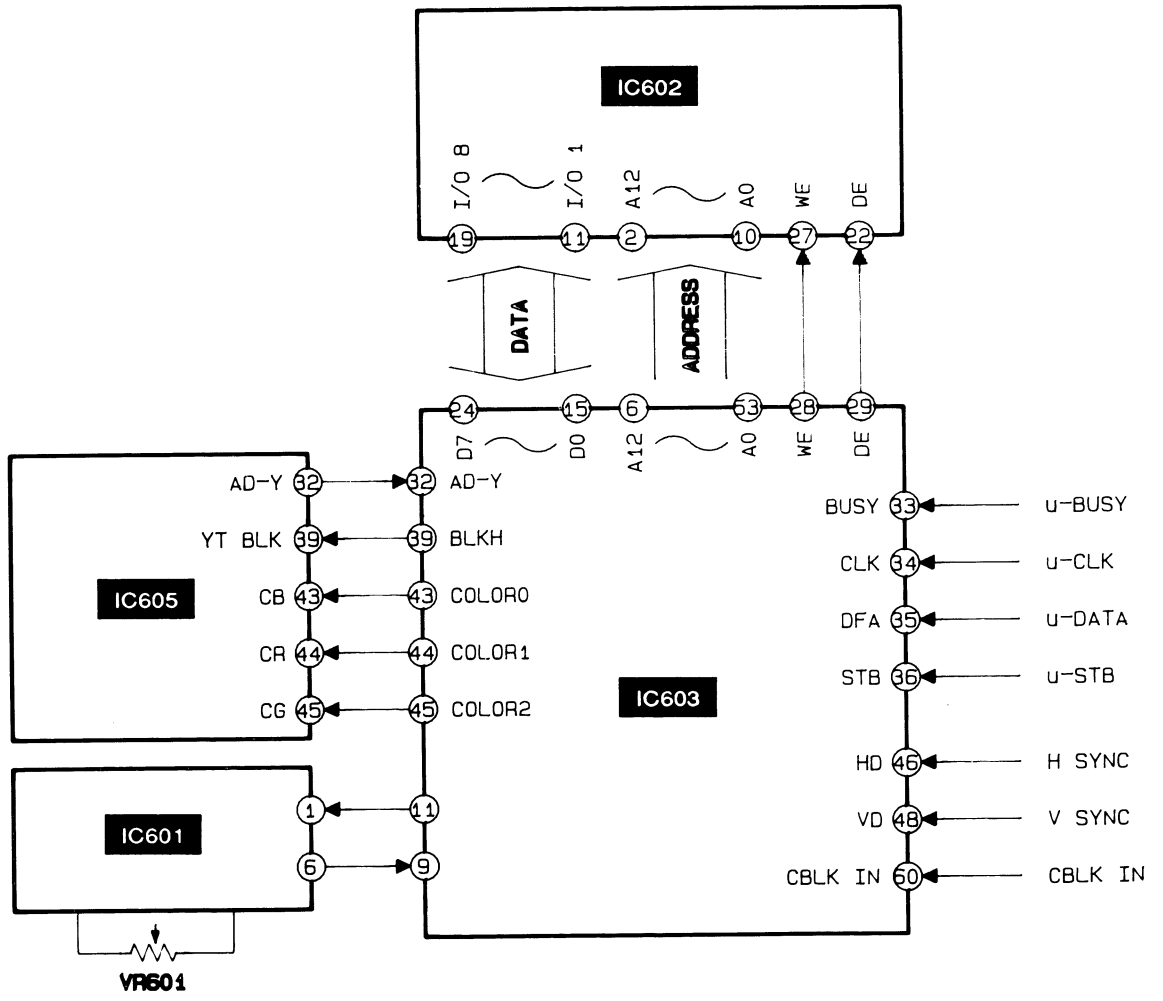
8-9. Process


AF Y
R-Y
B-Y
FL201
YH
LPF
BUFFER
BUFFER
BUFFER
AMP
AMP
BPF
54
YH IN
IC203
YH OUT 5
VAP OUT 11
R-Y OUT 20
B-Y OUT 19
S2 → 49 S2 IN
S1 → 50 S1 IN
R CONT → 38 R CONT
B CONT → 39 B CONT
DL Y1 IN 55
DL Y2 IN 56
DL C1 IN 48
DL YH OUT 4
DL YH IN 2
DL Y0 OUT 52
DL Y1 OUT 53
DL C0 OUT 45
FL203
LPF
6
4
1H
IC202
IC201
7 1H 2
11 1H 14
9 1H 16
FL204
DL
FL202
DL
IC205
33 DLD
35 DLE
42 YL-YH IN
1 R-Y IN
47 B-Y IN
16 COUT
18 CIN
YOUT 21
BUFFER
CAMERA OUT
BFG 9
BFG
CBLK 11
BF 10
4 4FSC
5 LALT
10 B-Y
9 R-Y
16 Vap IN
2 AF-Y
15 Vap OUT
13 R-Y OUT
11 B-Y OUT
CT BLK → 14
IC605
16 ← YT BLK
Q214
2SK209
PLL
BUFFER
40 ED
21 LSW
11 OSCI
12 OSCO
X201
17.734MHZ
BF IDP 20
CBLK 27
IC204
HD 42 → HD
VD 1 → VD
BUFFER
38 CLK
MCK

8-10. Auto Focus


AF Y
HPF1
HPF2
IC301
A/D IN 12
D6 1
15
D1 20
FL301
IC302
34 M20
26 HPF1
27 HPF2
19 D6
24 D1
PIPO1 40
PIPO8 47
R-Y 32
B-Y 33
IRIS 50
IC304
R-Y 8
B-Y 1
9
10
2
3
IC308
6
5
IC306
4 ZOOM TELE
2 ZOOM WIDE
9
10
IC303
62 ROM CLOCK
63 ROM DATA
59 ZOOM T
58 ZOOM W
17 P50
10 P57
STEP CLK 54
RESET 56
STEP ENA 57
CW/CCW 55
HALL OUT 49
SENSE 31
IC305
1 CK1
20 RESET
21 ENABLE
23 CW/CCW
B̄ 9
B 12
Ā 13
A 16
A Ā B B̄
IRIS BLOCK
DA+
DA−
DR+
DR−
LENS
VR302
IRIS CONTROL

8-11. Super Impose


IC602
I/O 8
I/O 1
A12
A0
WE
OE
19
11
2
10
27
22
DATA
ADDRESS
24
15
6
53
28
29
D7
D0
A12
A0
WE
OE
IC605
AD-Y 32
YT BLK 39
CB 43
CR 44
CG 45
32 AD-Y
39 BLKH
43 COLOR0
44 COLOR1
45 COLOR2
IC603
BUSY 33
CLK 34
DFA 35
STB 36
HD 46
VD 48
CBLK IN 60
u-BUSY
u-CLK
u-DATA
u-STB
H SYNC
V SYNC
CBLK IN
IC601
1
6
11
9
VR601

9. CIRCUIT BOARDS

Page

9-1. DC/DC Converter ------------------ 9-2

9-2. Remocon Module ----------------- 9-2

9-3. Headphone ---------------------- 9-4

9-4. MIC ---------------------------- 9-4

9-5. Main Function ------------------ 9-6

9-6. Audio -------------------------- 9-8

9-7. VTR Main ---------------------- 9-10

9-8. CAMERA Function ---------------- 9-12

9-9. E.V.F -------------------------- 9-12

9-10. CCD --------------------------- 9-14

9-11. Super Impose ------------------ 9-14

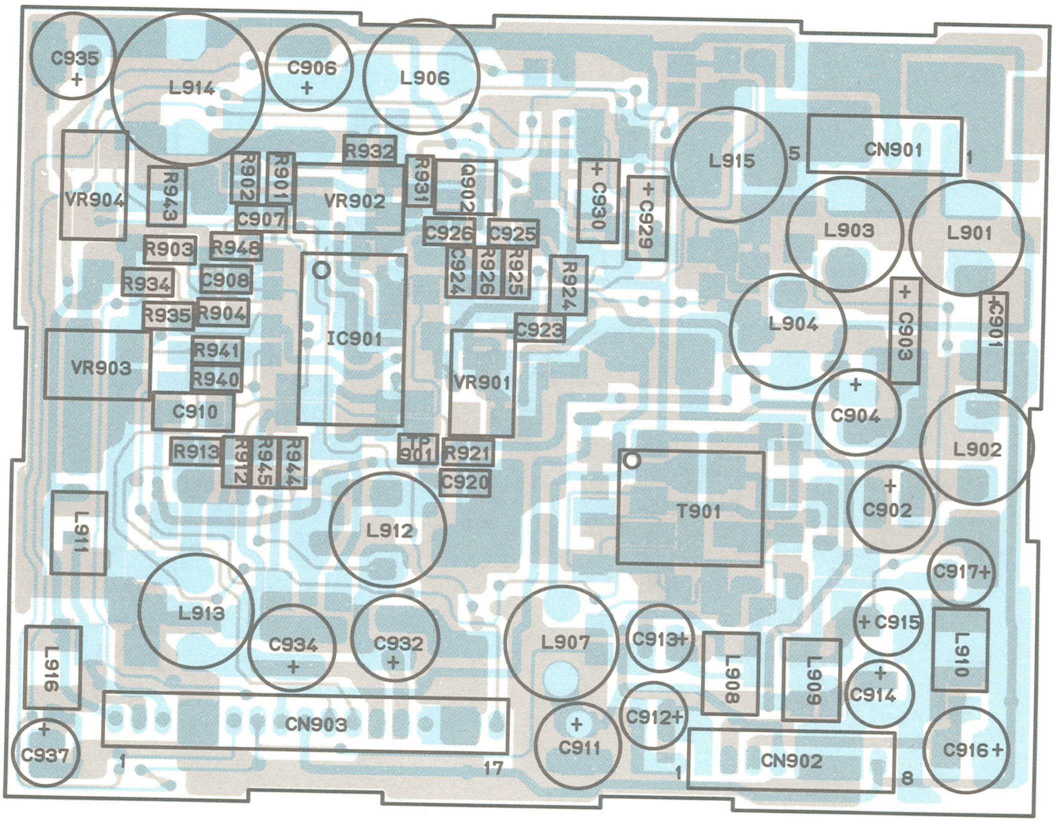
9-12. Lens Drive -------------------- 9-16

9-13. CAMERA Main ------------------- 9-18

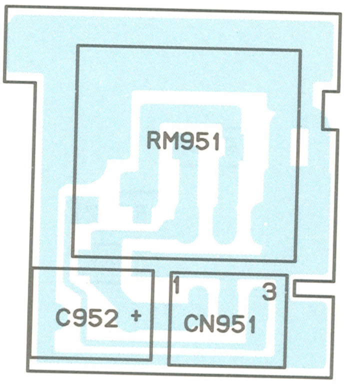
9-1. DC/DC Converter (Top Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing


C935
L914
C906
L906
VR904
R943
R902
R901
R932
R931
Q902
VR902
C907
C930
C929
L915
5
CN901
1
L903
L901
R903
R948
C926
C925
R934
C908
C924
R926
R925
R924
R935
R904
IC901
C923
L904
C903
C901
VR903
R941
R940
VR901
C904
C910
R913
R912
R945
R944
TP901
R921
C920
T901
L902
C902
L911
L912
C917
L913
C915
L916
C934
C932
L907
C913
L908
L909
L910
C914
CN903
C912
C911
C916
C937
1
17
1
CN902
8

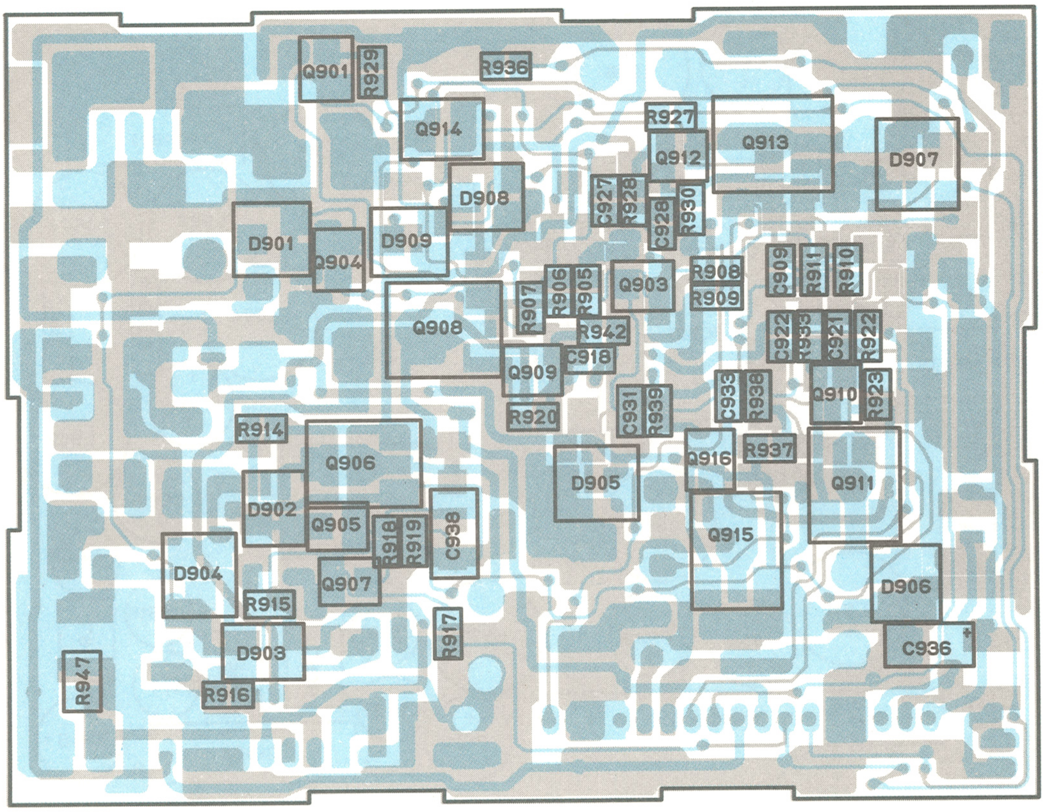
9-2. Remocon Module (Top Side)


RM951
C952
1
3
CN951

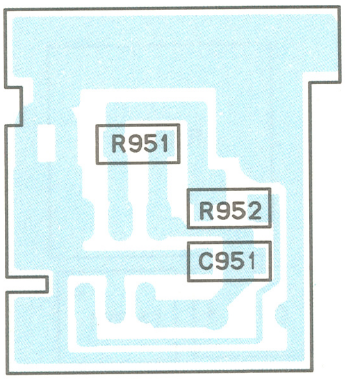
9-1. DC/DC Converter (Bottom Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing


Q901
R929
R936
Q914
R927
Q913
Q912
D907
D908
C927
R928
C928
R930
D901
Q904
D909
R906
R905
Q903
R908
R909
C909
R911
R910
Q908
R907
R942
C922
R933
C921
R922
C918
Q909
C931
R939
C933
R938
Q910
R923
R920
R914
Q906
D905
Q916
R937
Q911
D902
Q905
R918
R919
C938
Q915
D904
Q907
D906
R915
R917
C936
D903
R947
R916

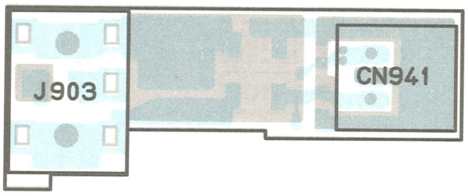
9-2. Remocon Module (Bottom Side)


R951
R952
C951

9-3. Headphone (Top Side)

▨ : Pattern of the rear side

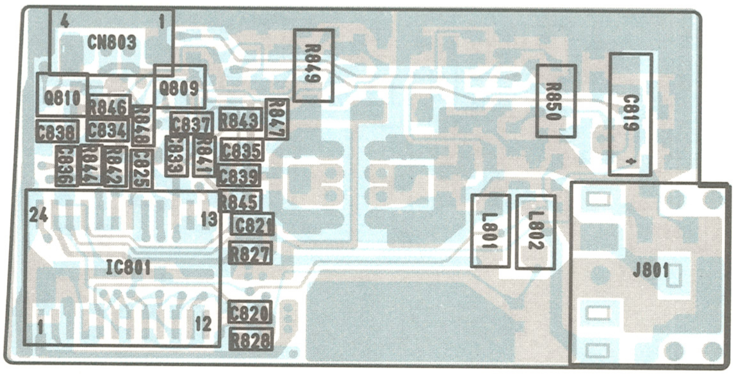
▨ : Pattern from the side which enables seeing



9-4. MIC (Top Side)

▨ : Pattern of the rear side

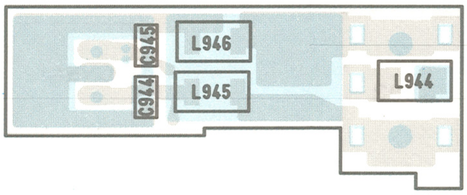
▨ : Pattern from the side which enables seeing


4
1
CN803
R849
Q810
Q809
R846
R848
C837
R843
R847
R850
C819
C838
C834
C833
R841
C835
C836
R844
R842
C825
C839
+
R845
24
13
C821
L801
L802
R827
IC801
J801
C820
1
12
R828

9-3. Headphone (Bottom Side)

▨ : Pattern of the rear side

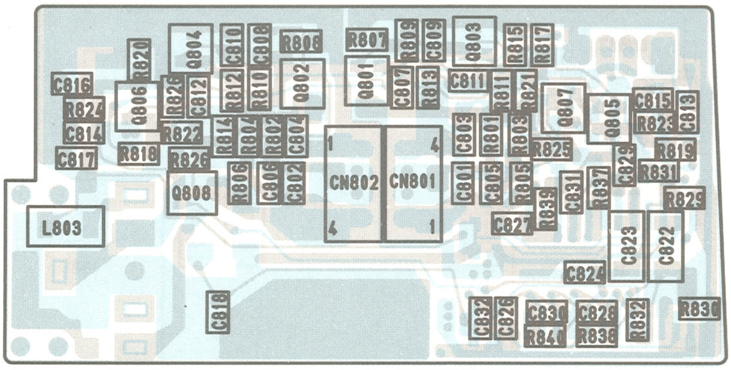
▨ : Pattern from the side which enables seeing


C945
C944
L946
L945
L944

9-4. MIC (Bottom Side)

▨ : Pattern of the rear side

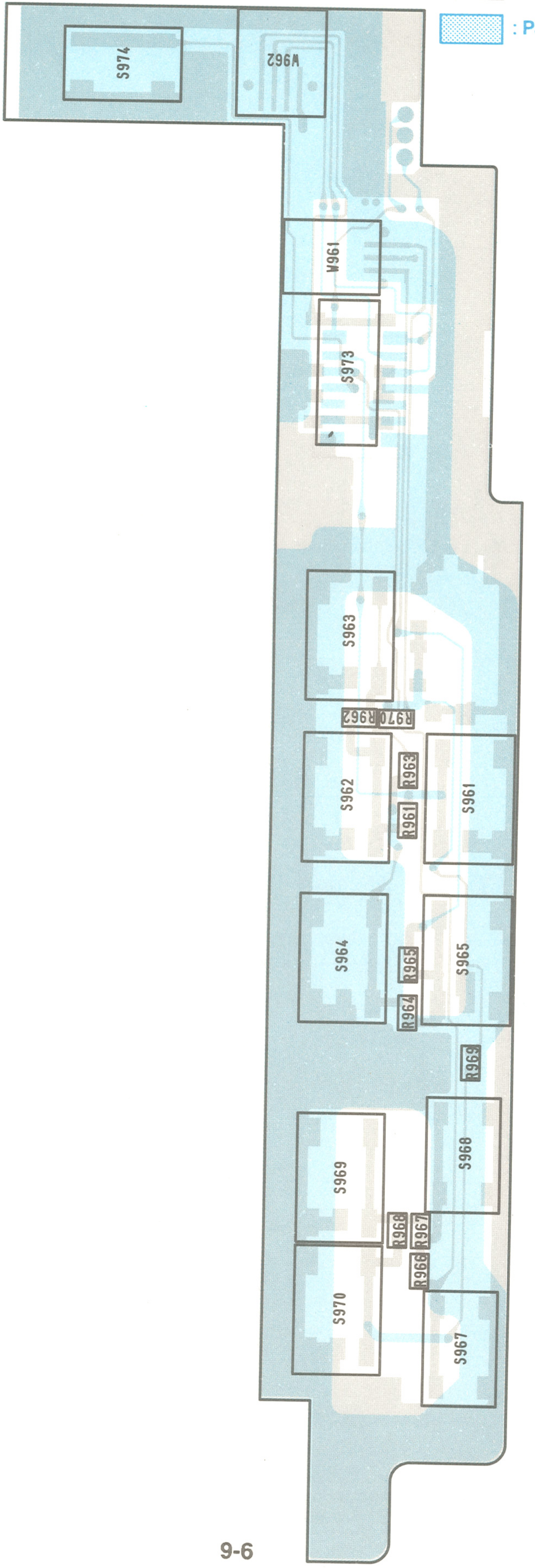
▨ : Pattern from the side which enables seeing


R820
Q804
C810
C808
R808
R807
R809
C809
Q803
R815
R817
C816
R824
C814
C817
Q806
R826
C812
R812
R810
Q802
Q801
C807
R813
C811
R811
R821
Q807
Q805
C815
R823
C813
R822
R818
R826
R814
R804
R802
C804
1
4
CN802
CN801
4
1
C803
R801
R803
R825
R819
C829
R831
Q808
R806
C806
C802
C801
C805
R805
R839
C831
R837
R829
L803
C827
C823
C822
C824
C818
C832
C826
C830
R840
C828
R838
R832
R830

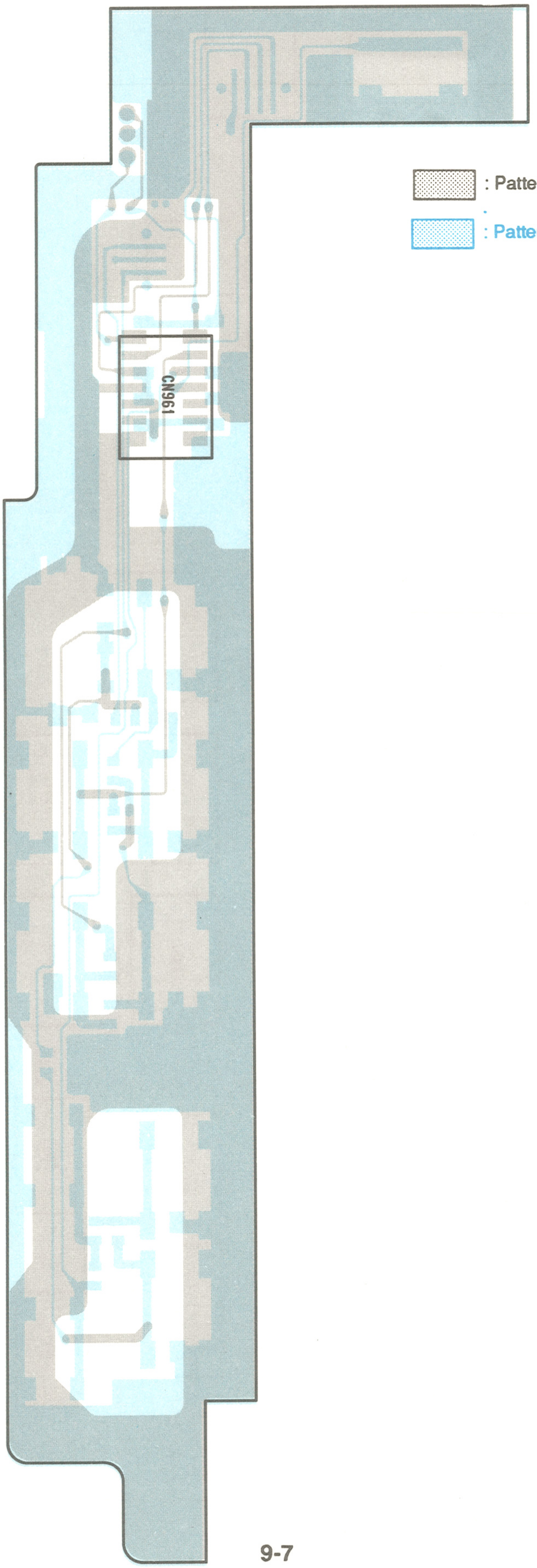
9-5. Main Function (Top Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing


S974
W962
W961
S973
S963
R962
R970
S962
R963
R961
S961
S964
R965
R964
S965
R969
S969
S968
R968
R967
R966
S970
S967

9-5. Main Function (Bottom Side)



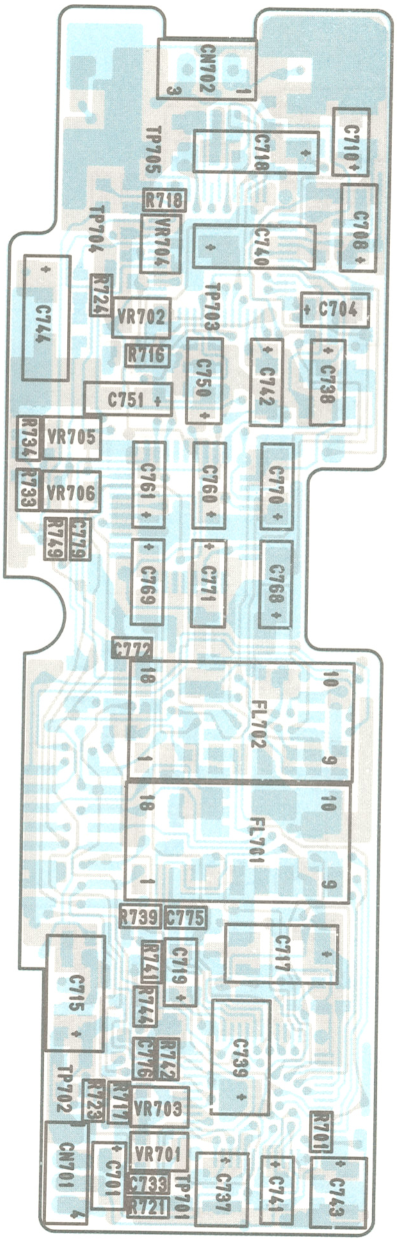
▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing

9-6. Audio (Top Side)

▨ : Pattern of the rear side

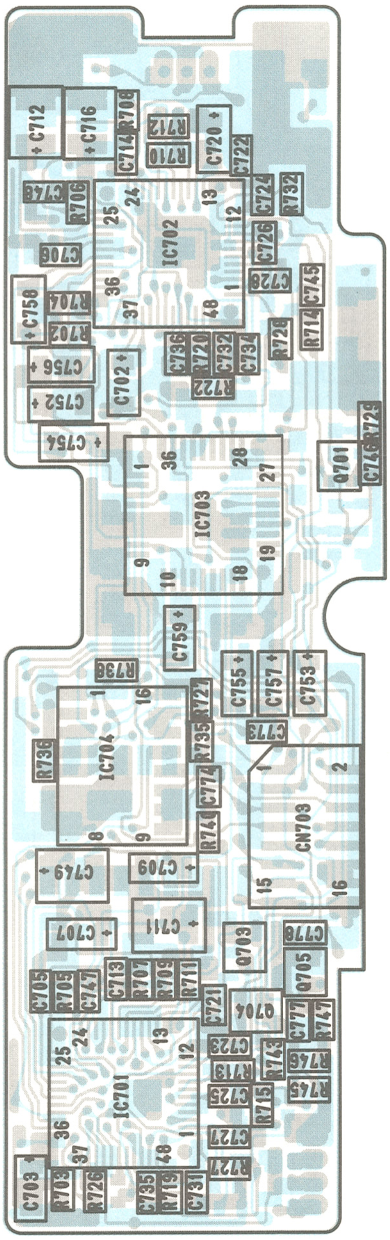
▨ : Pattern from the side which enables seeing


CN702
3
1
C716
C718
TP705
R718
VR704
C740
C708
TP704
C744
R724
VR702
TP703
C704
R716
C750
C742
C738
C751
R734
VR705
C761
C760
C770
R733
VR706
R749
C779
C769
C771
C768
C772
18
10
FL702
1
9
18
10
FL701
1
9
R739
C775
C717
R741
C719
C715
R744
C739
R742
C776
TP702
R723
R717
VR703
R701
CN701
4
C701
VR701
C733
TP701
R721
C737
C741
C743

9-6. Audio (Bottom Side)

▨ : Pattern of the rear side

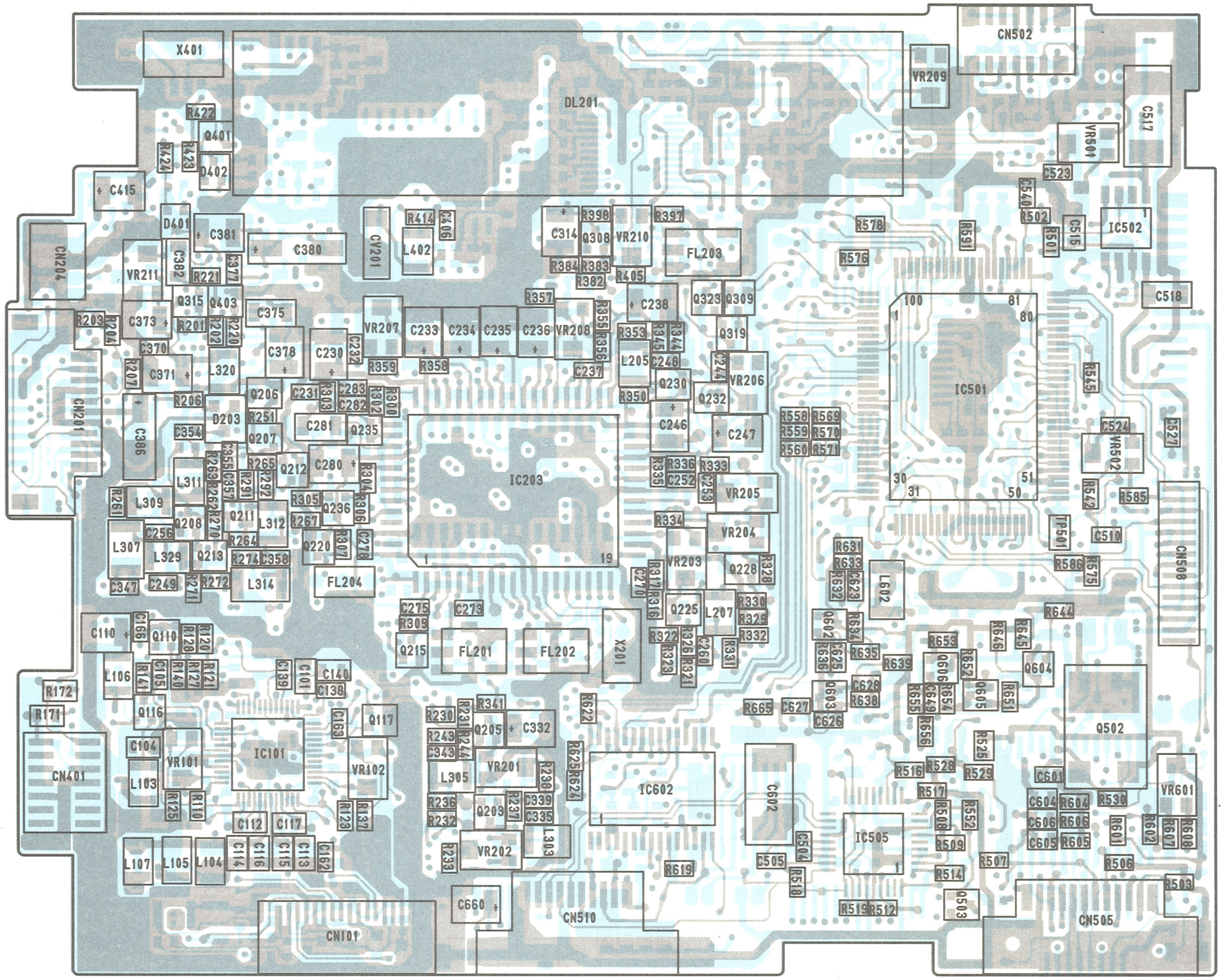
▨ : Pattern from the side which enables seeing


C712
C716
R708
R712
C720
C714
R710
C722
C748
R706
IC702
25
24
13
12
C724
R732
C708
C726
C758
R704
36
37
48
1
C728
C745
R702
C736
R720
C732
C734
R728
R714
C756
C702
R722
C752
C754
IC703
1
36
28
27
9
10
18
19
Q701
C746
R729
C759
R738
C755
C757
C753
IC704
1
16
8
9
R727
R735
C773
R736
C774
CN703
1
2
15
16
R741
C749
C709
C707
C711
Q703
C778
C705
R705
C747
C713
R707
R709
R711
C721
Q704
Q705
C777
R747
IC701
25
24
13
12
C723
R743
R746
R713
C725
R745
R715
36
37
48
1
C727
C703
R703
R726
C735
R719
C731
R727

9-7. VTR Main (Top Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing

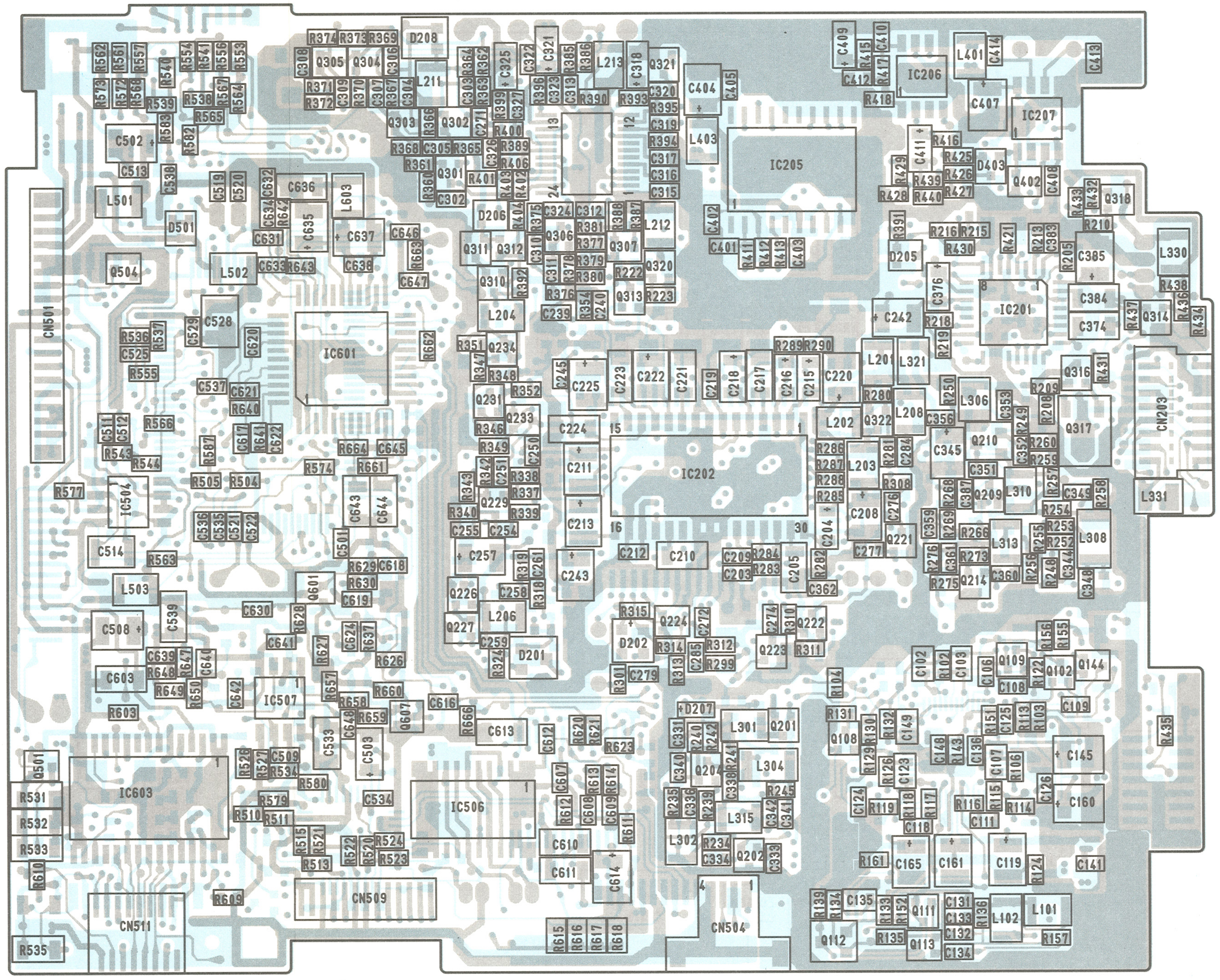


X401
DL201
CN502
VR209
IC501
IC203
IC101
IC602
IC505
IC502
CN204
CN201
CN401
CN101
CN510
CN505
CN508
X201
FL201
FL202
FL203
FL204
Q502
VR601

9-7. VTR Main (Bottom Side)

▨ : Pattern of the rear side

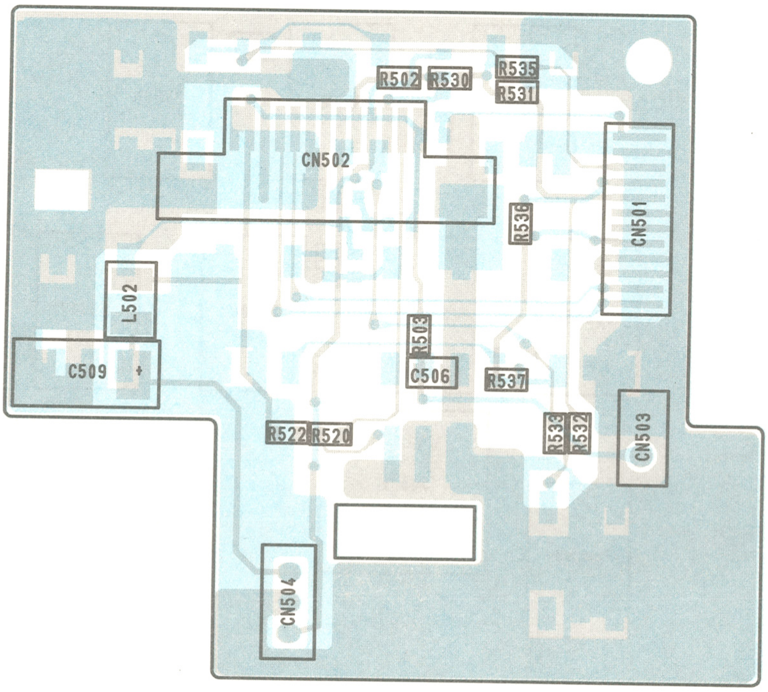
▨ : Pattern from the side which enables seeing



9-8. CAMERA Function (Top Side)

▨ : Pattern of the rear side

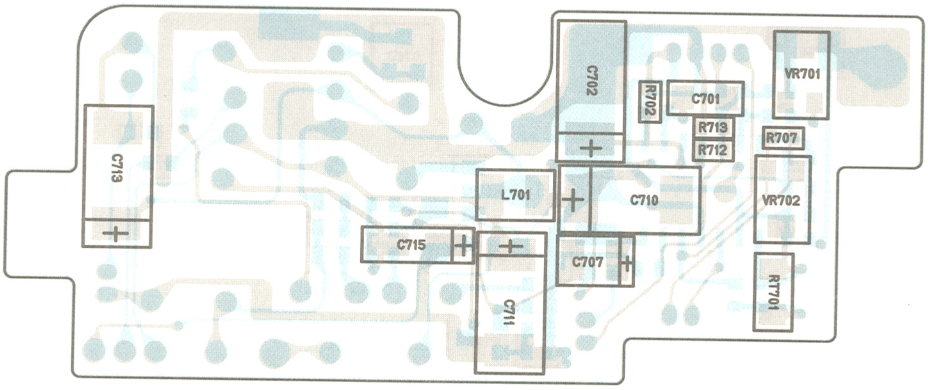
▨ : Pattern from the side which enables seeing


R502
R530
R535
R531
CN502
R536
CN501
L502
R503
C509
C506
R537
R522
R520
R533
R532
CN503
CN504

9-9. E.V.F (Top Side)

▨ : Pattern of the rear side

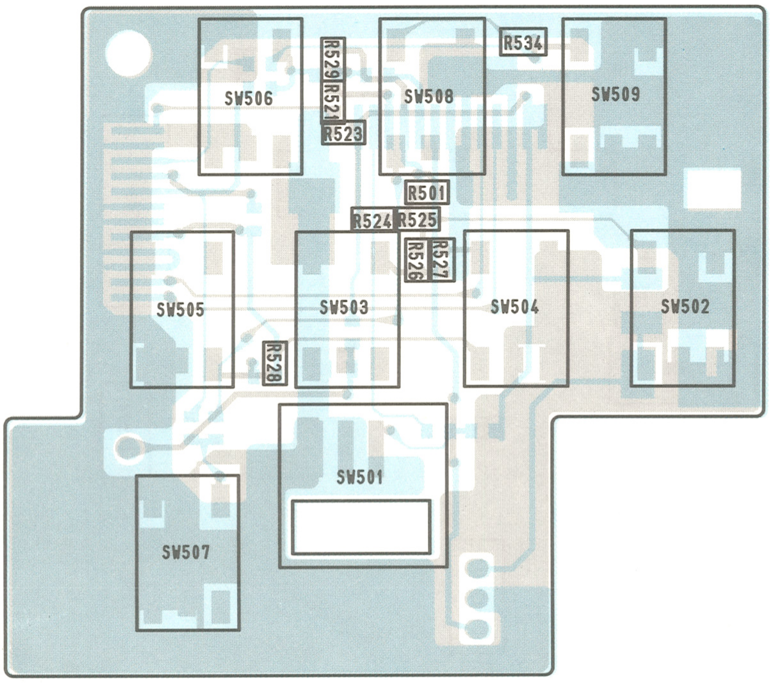
▨ : Pattern from the side which enables seeing


C702
R702
C701
VR701
R713
R712
R707
C713
L701
C710
VR702
C715
C707
C711
RT701

9-8. CAMERA Function (Bottom Side)

▨ : Pattern of the rear side

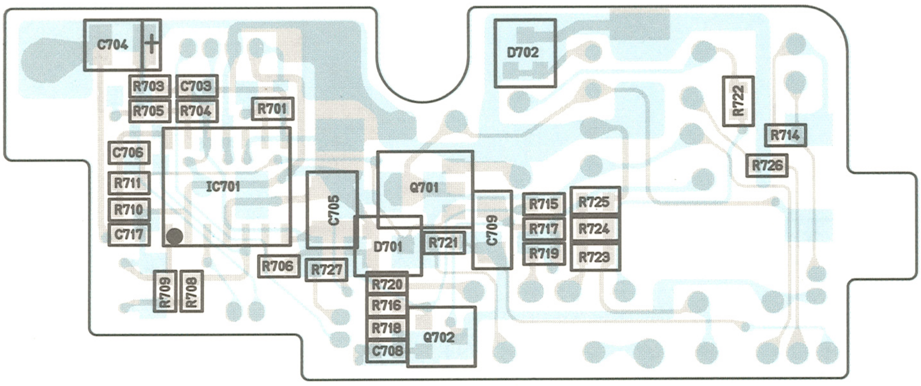
🟦 : Pattern from the side which enables seeing


R534
R529
R521
R523
SW506
SW508
SW509
R501
R524
R525
R526
R527
SW505
SW503
SW504
SW502
R528
SW501
SW507

9-9. E.V.F (Bottom Side)

▨ : Pattern of the rear side

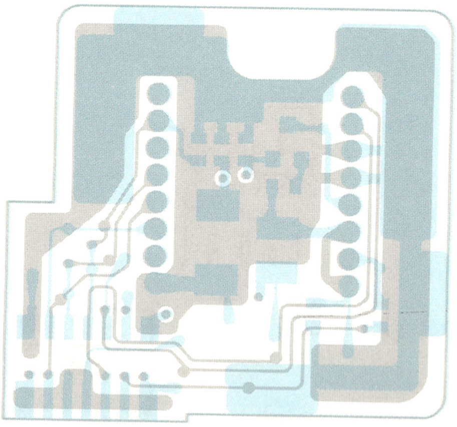
🟦 : Pattern from the side which enables seeing


C704
R703
C703
R705
R704
R701
D702
R722
R714
R726
C706
R711
R710
C717
IC701
C705
Q701
D701
R721
C709
R715
R717
R719
R725
R724
R723
R706
R727
R709
R708
R720
R716
R718
C708
Q702

9-10. CCD (Top Side)

▨ : Pattern of the rear side

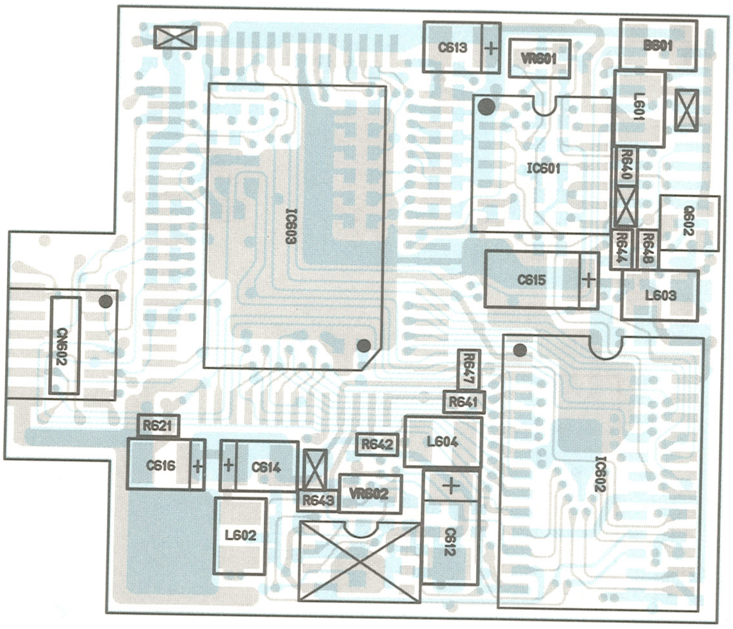
▨ : Pattern from the side which enables seeing



9-11. Super Impose (Top Side)

▨ : Pattern of the rear side

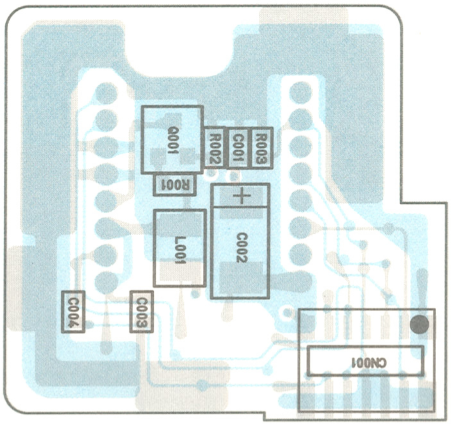
▨ : Pattern from the side which enables seeing


C613
VR601
B601
L601
IC601
R640
Q602
R644
R648
C615
L603
IC603
CN602
R647
R641
R621
C616
C614
R642
L604
R643
VR602
L602
C612
IC602

9-10. CCD (Bottom Side)

▨ : Pattern of the rear side

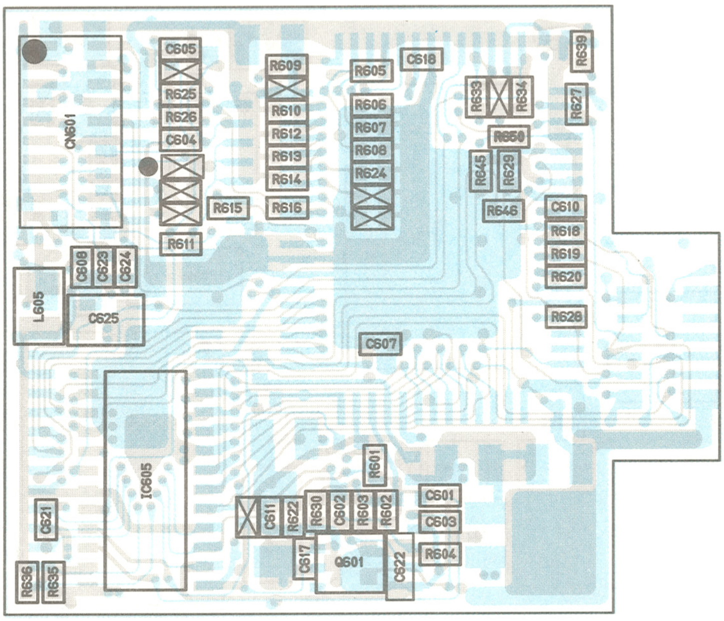
▨ : Pattern from the side which enables seeing


Q001
R002
C001
R003
R001
L001
C002
C004
C003
CN001

9-11. Super Impose (Bottom Side)

▨ : Pattern of the rear side

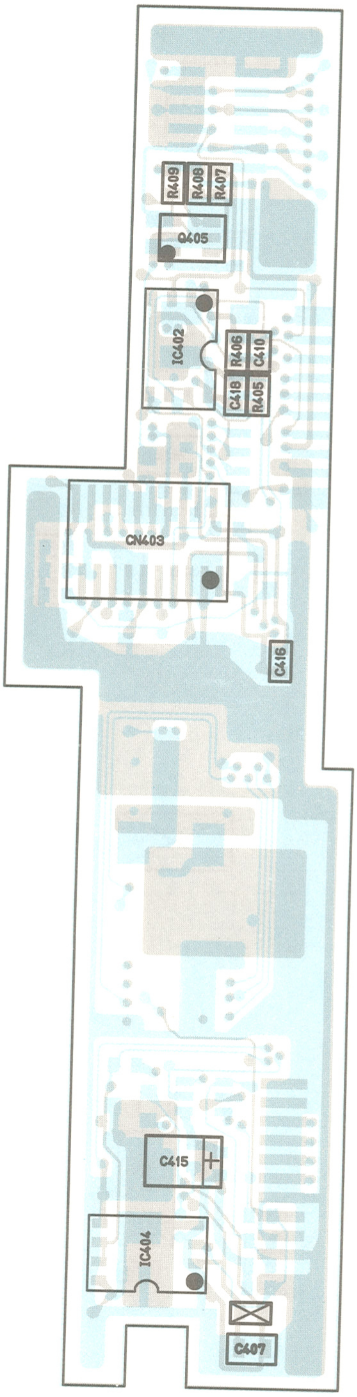
▨ : Pattern from the side which enables seeing


CN601
C605
R625
R626
C604
R615
R611
R609
R610
R612
R613
R614
R616
R605
C618
R606
R607
R608
R624
R633
R634
R639
R627
R650
R645
R629
R646
C610
R618
R619
R620
R628
C608
C623
C624
L605
C625
C607
IC605
C621
R636
R635
R601
C611
R622
R630
C602
R603
R602
C601
C603
R604
C617
Q601
C622

9-12. Lens Drive (Top Side)

▨ : Pattern of the rear side

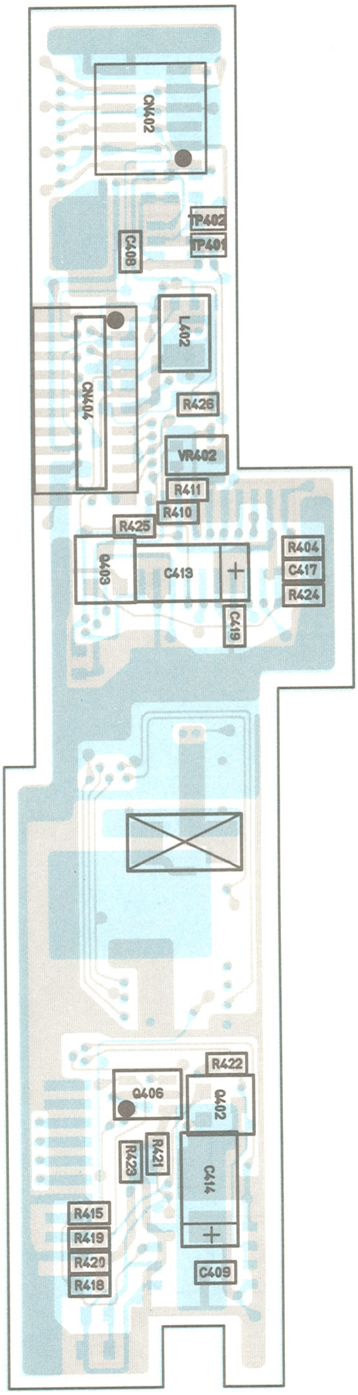
▨ : Pattern from the side which enables seeing


R409
R408
R407
Q405
IC402
R406
C410
C418
R405
CN403
C416
C415
IC404
C407

9-12. Lens Drive (Bottom Side)

▨ : Pattern of the rear side

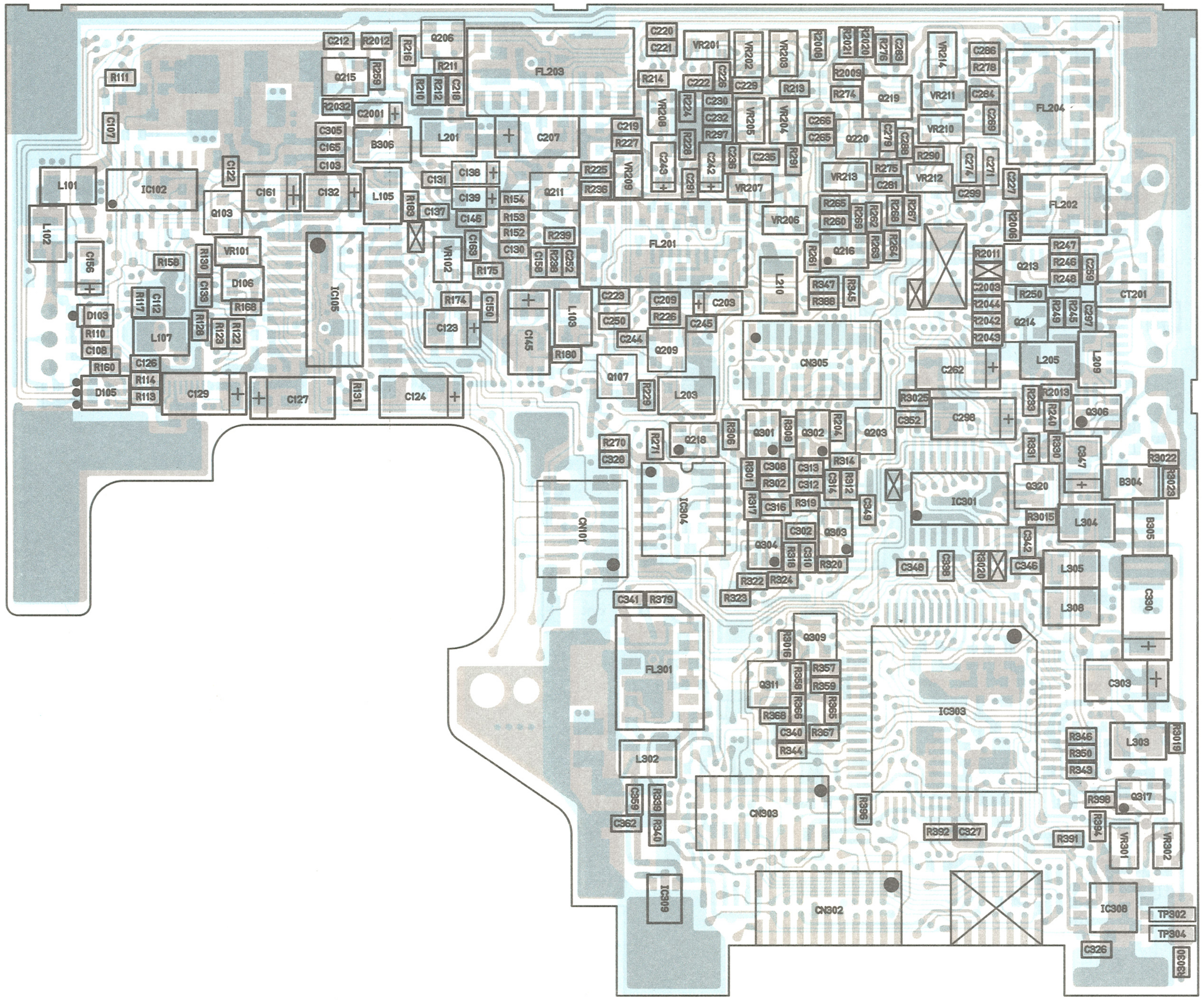
▨ : Pattern from the side which enables seeing


CN402
TP402
TP401
C408
L402
CN404
R426
VR402
R411
R410
R425
Q403
C413
R404
C417
R424
C419
R422
Q406
Q402
R421
R423
C414
R415
R419
R420
R418
C409

9-13. CAMERA Main (Top Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing

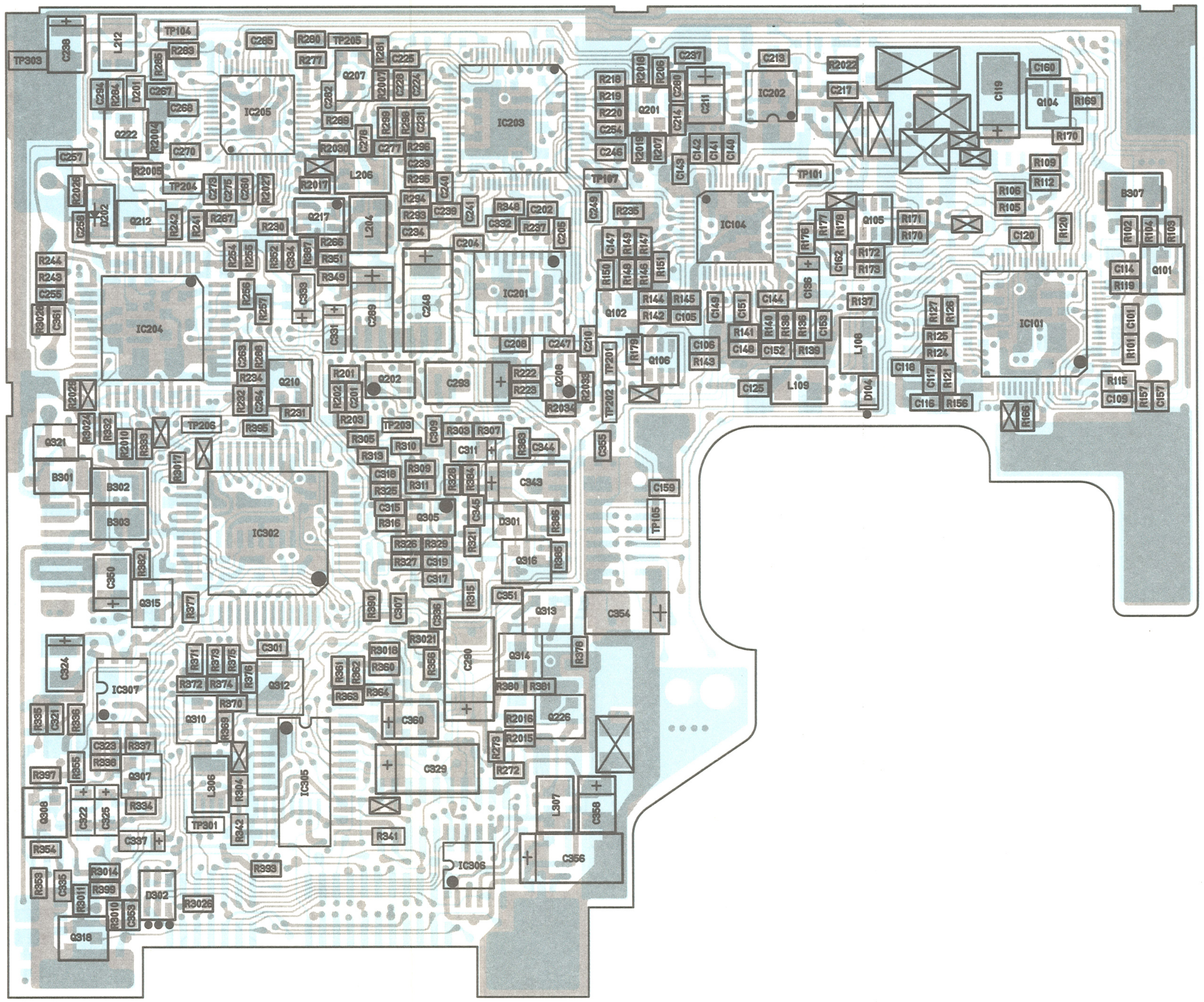


L101
L102
C107
R111
IC102
C166
D103
R110
C108
R160
D105
R113
R114
C126
L107
R158
R117
C112
R120
R136
C135
R123
R122
Q103
VR101
D106
R168
C122
C161
C132
C129
C127
C212
R2012
Q215
R259
R2032
C2001
C305
C165
C103
B306
L105
IC105
R131
C124
R216
Q206
R211
R210
R212
C218
FL203
L201
C207
C138
C131
C139
C137
R169
C146
R154
R153
R152
C130
C169
VR102
R175
R174
C123
C150
C145
L103
R180
Q211
R239
C220
C221
VR201
R214
C222
C229
C219
R227
R225
R236
VR209
C243
VR208
R224
R228
R297
C230
C232
VR203
VR205
VR204
VR202
R2006
R2021
R276
C283
R2009
R219
R274
Q219
C266
C265
Q220
C235
R291
VR207
VR213
R275
C281
VR212
R290
VR214
VR211
VR210
C286
R278
C284
C289
FL204
C299
C227
FL202
FL201
VR206
R265
R260
Q216
R347
R345
R288
L210
R2011
R2003
R2044
R2042
R2043
R247
R246
R248
Q213
R250
Q214
CT201
C223
C209
C203
C250
R226
C245
C244
Q209
Q107
R229
L203
CN305
C262
L205
L209
R3025
C352
C298
R2013
Q306
R270
C328
R271
Q218
R306
Q301
Q302
Q303
R314
C308
C313
R302
C312
C315
R319
C302
Q304
C310
R320
R322
R324
R323
IC301
Q320
R3015
L304
B304
R3022
C346
C348
L305
L306
B305
C390
CN101
IC304
C341
R379
FL301
Q309
Q311
R357
R359
R366
C340
R367
R344
R3016
IC303
C303
L302
C359
C362
R339
R340
CN303
R346
R350
R343
L303
R3019
R398
Q317
R391
VR301
VR302
R392
C327
IC309
CN302
IC308
TP302
TP304
C326

9-13. CAMERA Main (Bottom Side)

▨ : Pattern of the rear side

▨ : Pattern from the side which enables seeing


IC101
IC104
IC201
IC202
IC203
IC204
IC205
IC302
IC305
IC306
IC307

10. SCHEMATIC DIAGRAMS

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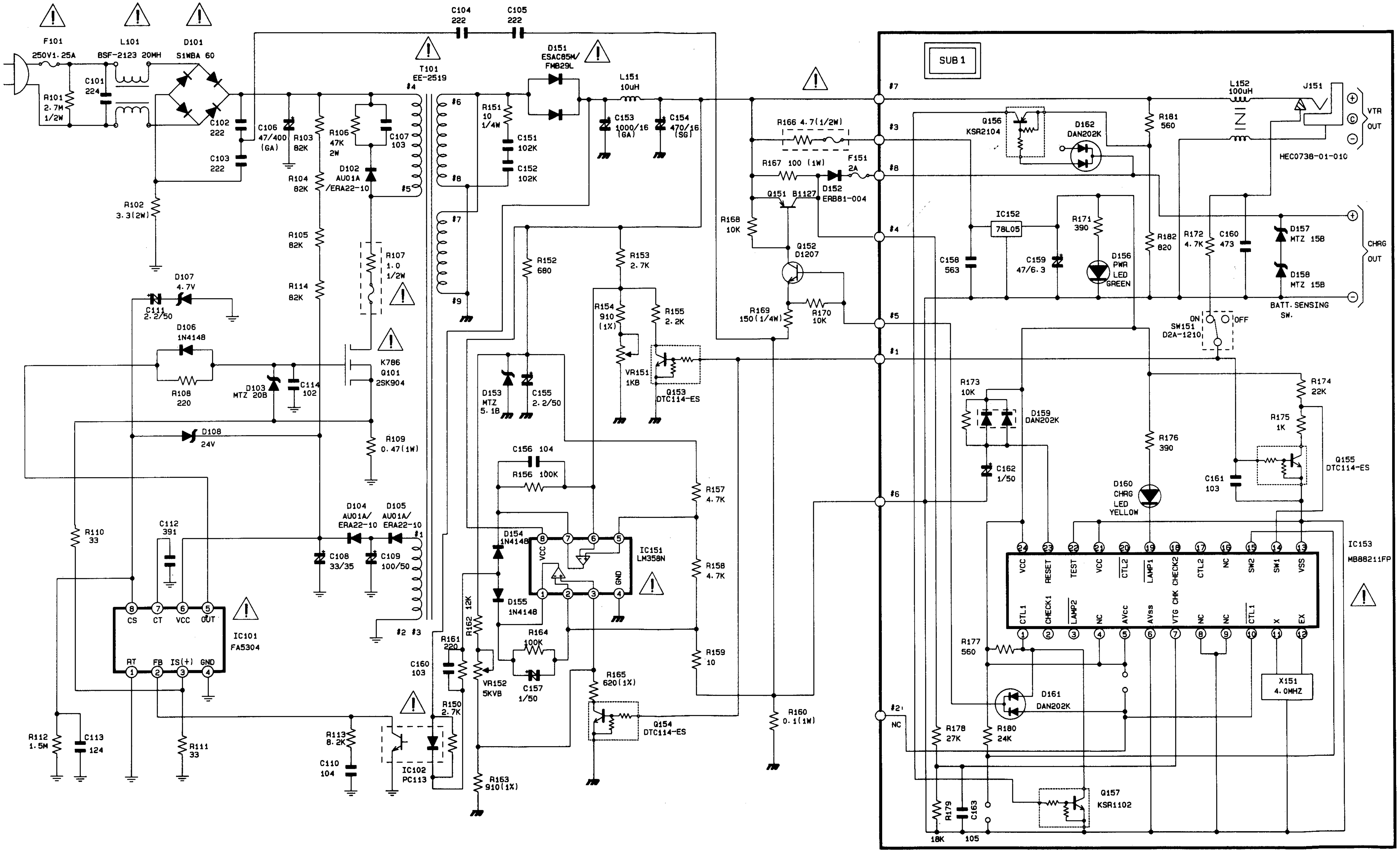
10-1. Adaptor


F101
250V1.25A
L101
BSF-2123 20MH
D101
S1WBA 60
R101
2.7M
1/2W
C101
224
C102
222
C103
222
R102
3.3(2W)
C104
222
C105
222
T101
EE-2519
C106
47/400
(GA)
R103
82K
R104
82K
R105
82K
R114
82K
R106
47K
2W
C107
103
D102
AU01A
/ERA22-10
R107
1.0
1/2W
K786
Q101
2SK904
R108
220
D106
1N4148
D107
4.7V
C111
2.2/50
D103
MTZ 20B
C114
102
D108
24V
R109
0.47(1W)
R110
33
C112
391
D104
AU01A/
ERA22-10
D105
AU01A/
ERA22-10
C108
33/35
C109
100/50
IC101
FA5304
CS
CT
VCC
OUT
RT
FB
IS(+)
GND
R112
1.5M
C113
124
R111
33
R113
8.2K
C110
104
IC102
PC113
R150
2.7K
R161
220
C160
103
R162 12K
VR152
5KVB
R163
910(1%)
D151
ESAC85M/
FMB29L
R151
10
1/4W
C151
102K
C152
102K
L151
10uH
C153
1000/16
(GA)
C154
470/16
(SG)
R152
680
D153
MTZ
5.1B
C155
2.2/50
R153
2.7K
R154
910
(1%)
VR151
1KB
R155
2.2K
Q153
DTC114-ES
C156 104
R156 100K
D154
1N4148
D155
1N4148
IC151
LM358N
R164
100K
C157
1/50
R157
4.7K
R158
4.7K
R159
10
R165
620(1%)
Q154
DTC114-ES
R160
0.1(1W)
R166 4.7(1/2W)
R167 100 (1W)
F151
2A
D152
ERB81-004
Q151 B1127
R168
10K
Q152
D1207
R169
150(1/4W)
R170
10K
SUB 1
#7
#3
#8
#4
#5
#1
#6
#2
NC
#6
#8
#7
#9
#4
#5
#1
#2 #3
Q156
KSR2104
D162
DAN202K
IC152
78L05
C158
563
C159
47/6.3
R171
390
D156
PWR
LED
GREEN
R181
560
R182
820
R172
4.7K
C160
473
L152
100uH
J151
HEC0738-01-010
VTR
OUT
D157
MTZ 15B
D158
MTZ 15B
CHRG
OUT
BATT. SENSING
SW.
ON
OFF
SW151
D2A-1210
R173
10K
D159
DAN202K
C162
1/50
R176
390
D160
CHRG
LED
YELLOW
R174
22K
R175
1K
Q155
DTC114-ES
C161
103
IC153
MB88211FP
VCC
RESET
TEST
VCC
CTL2
LAMP1
CHECK2
CTL2
NC
SW2
SW1
VSS
CTL1
CHECK1
LAMP2
NC
AVcc
AVss
VTG CHK
NC
NC
CTL1
X
EX
R177
560
D161
DAN202K
X151
4.0MHZ
R178
27K
R180
24K
R179
C163
18K
105
Q157
KSR1102

SPECIAL NOTE
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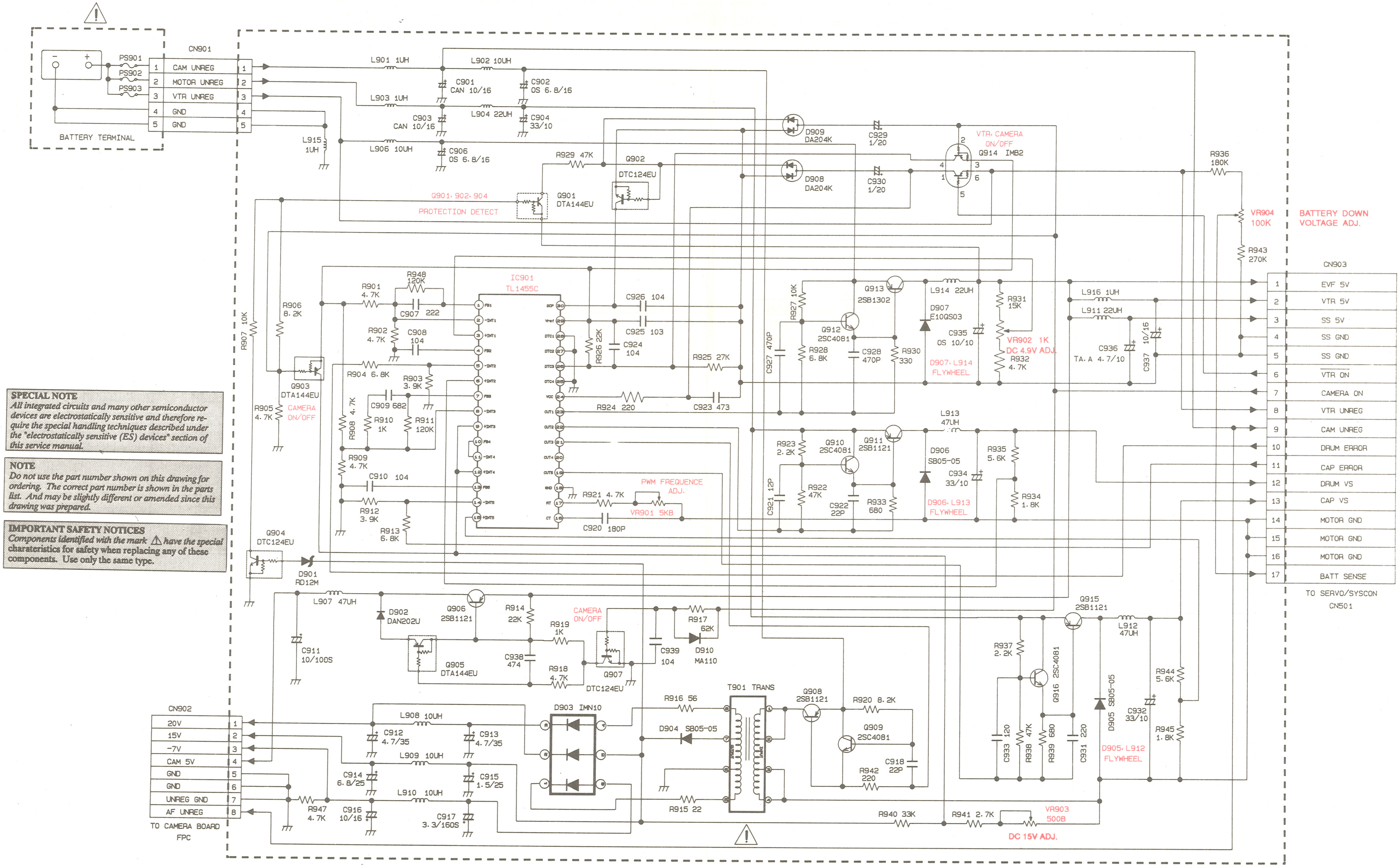
NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

IMPORTANT SAFETY NOTICES
Components identified with the mark ⚠ have the special charateristics for safety when replacing any of these components. Use only the same type.

10-2. DC/DC Converter


⚠
BATTERY TERMINAL
PS901
PS902
PS903
CN901
1 CAM UNREG
2 MOTOR UNREG
3 VTR UNREG
4 GND
5 GND
L901 1UH
L902 10UH
C901 CAN 10/16
C902 OS 6.8/16
L903 1UH
L904 22UH
C903 CAN 10/16
C904 33/10
L915 1UH
L906 10UH
C906 OS 6.8/16
D909 DA204K
D908 DA204K
C929 1/20
C930 1/20
VTR・CAMERA ON/OFF
Q914 IMB2
R929 47K
Q902 DTC124EU
Q901・902・904 PROTECTION DETECT
Q901 DTA144EU
R936 180K
VR904 100K
BATTERY DOWN VOLTAGE ADJ.
R943 270K
IC901 TL1455C
R948 120K
R901 4.7K
C907 222
R906 8.2K
R902 4.7K
C908 104
R907 10K
C926 104
C925 103
C924 104
R926 22K
R925 27K
R904 6.8K
R903 3.9K
Q903 DTA144EU
C909 682
R924 220
C923 473
R905 4.7K
CAMERA ON/OFF
R908 4.7K
R910 1K
R911 120K
R909 4.7K
C910 104
R912 3.9K
R913 6.8K
R921 4.7K
PWM FREQUENCE ADJ.
VR901 5KB
C920 180P
Q913 2SB1302
Q912 2SC4081
R927 10K
C927 470P
R928 6.8K
C928 470P
R930 330
L914 22UH
D907 E10QS03
C935 OS 10/10
R931 15K
VR902 1K DC 4.9V ADJ.
R932 4.7K
D907, L914 FLYWHEEL
L916 1UH
L911 22UH
C936 TA.A 4.7/10
C937 10/16
L913 47UH
Q910 2SC4081
Q911 2SB1121
R923 2.2K
D906 SB05-05
R935 5.6K
C934 33/10
R934 1.8K
C921 12P
R922 47K
C922 22P
R933 680
D906, L913 FLYWHEEL
CN903
1 EVF 5V
2 VTR 5V
3 SS 5V
4 SS GND
5 SS GND
6 VTR ON
7 CAMERA ON
8 VTR UNREG
9 CAM UNREG
10 DRUM ERROR
11 CAP ERROR
12 DRUM VS
13 CAP VS
14 MOTOR GND
15 MOTOR GND
16 MOTOR GND
17 BATT SENSE
TO SERVO/SYSCON CN501
Q904 DTC124EU
D901 RD12M
L907 47UH
C911 10/100S
D902 DAN202U
Q906 2SB1121
Q905 DTA144EU
R914 22K
R919 1K
CAMERA ON/OFF
C938 474
R918 4.7K
Q907 DTC124EU
C939 104
R917 62K
D910 MA110
Q915 2SB1121
L912 47UH
R937 2.2K
Q916 2SC4081
R944 5.6K
D905 SB05-05
C932 33/10
R945 1.8K
C933 120
R938 47K
R939 680
C931 220
D905, L912 FLYWHEEL
T901 TRANS
Q908 2SB1121
R920 8.2K
Q909 2SC4081
C918 22P
R942 220
R916 56
D904 SB05-05
R915 22
D903 IMN10
L908 10UH
C912 4.7/35
C913 4.7/35
L909 10UH
C914 6.8/25
C915 1.5/25
L910 10UH
R947 4.7K
C916 10/16
C917 3.3/160S
R940 33K
R941 2.7K
VR903 500B
DC 15V ADJ.
⚠
CN902
1 20V
2 15V
3 -7V
4 CAM 5V
5 GND
6 GND
7 UNREG GND
8 AF UNREG
TO CAMERA BOARD FPC

SPECIAL NOTE
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NOTE
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10-3. System Control/Servo

The schematic diagram of "System Control/Servo" is on page 10-29.

IC501 [CXP80724]

PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	0.0V	5.0V
3	0.0V	0.0V
4	0.0V	0.0V
5	5.0V	0.0V
6	0.0V	5.0V
7	0.0V	0.0V
8	0.0V	4.6V
9	0.0V	5.0V
10	0.0V	0.0V
11	5.0V	5.0V
12	5.0V	0.0V
13	0.0V	0.0V
14	0.0V	0.0V
15	0.0V	4.8V
16	4.8V	0.0V
17	0.0V	0.0V
18	4.6V	4.6V
19	4.6V	4.6V
20	4.6V	4.6V
21	0.0V	0.0V
22	4.6V	4.6V
23	4.6V	4.6V
24	4.6V	4.6V
25	0.0V	0.0V
26	0.0V	0.0V
27	0.0V	0.0V
28	0.0V	0.0V
29	0.0V	0.0V
30	0.0V	4.7V
31	4.2V	4.2V
32	5.0V	0.0V
33	4.0V	0.0V
34	0.0V	0.0V
35	0.0V	0.0V
36	4.0V	0.0V
37	5.0V	0.0V
38	4.0V	0.0V
39	0.0V	0.0V
40	3.5V	4.8V
41	0.0V	0.0V
42	2.8V	5.0V
43	2.3V	2.3V
44	5.0V	5.0V
45	0.0V	0.0V
46	4.0V	0.0V
47	4.0V	0.0V
48	4.4V	5.0V
49	4.4V	5.0V
50	4.4V	5.0V

IC501 [CXP80724]

PIN NO	PLAY BACK	RECORD
51	4.5V	5.0V
52	0.0V	0.0V
53	5.0V	5.0V
54	5.0V	5.0V
55	4.4V	0.0V
56	4.2V	4.4V
57	4.2V	0.0V
58	4.2V	4.2V
59	2.5V	2.7V
60	3.6V	3.3V
61	4.4V	3.1V
62	2.6V	0.0V
63	4.6V	4.8V
64	4.6V	4.8V
65	0.0V	4.6V
66	2.6V	2.6V
67	0.8V	4.7V
68	0.0V	0.0V
69	4.4V	4.8V
70	4.4V	5.0V
71	0.0V	0.0V
72	0.0V	0.0V
73	1.2V	1.4V
74	2.2V	5.0V
75	4.0V	4.8V
76	0.0V	0.0V
77	4.4V	0.0V
78	0.0V	0.0V
79	0.0V	0.0V
80	0.0V	0.0V
81	0.0V	4.8V
82	4.0V	5.0V
83	5.0V	5.0V
84	0.0V	0.0V
85	0.0V	0.0V
86	0.0V	0.0V
87	5.0V	5.0V
88	0.0V	0.0V
89	5.0V	5.0V
90	5.2V	5.2V
91	0.0V	0.0V
92	0.0V	0.0V
93	5.0V	0.0V
94	5.0V	0.0V
95	5.0V	5.0V
96	0.0V	0.0V
97	0.0V	0.0V
98	0.0V	0.0V
99	5.0V	5.0V
100	5.0V	5.0V

IC502 [S-8420BF]

PIN NO	PLAY BACK	RECORD
1	1.0V	1.0V
2	2.6V	2.6V
3	2.6V	2.6V
4	0.0V	0.0V
5	1.3V	0.0V
6	1.3V	0.0V
7	1.3V	0.0V
8	5.0V	5.0V

IC504 [NJM2904M]

PIN NO	PLAY BACK	RECORD
1	3.8V	3.8V
2	1.2V	2.8V
3	2.5V	2.5V
4	0.0V	0.0V
5	0.0V	2.5V
6	2.5V	2.5V
7	0.8V	1.0V
8	5.0V	5.0V

IC506 [LB1631MT]

PIN NO	PLAY BACK	RECORD
1	5.0V	5.0V
2	0.0V	0.0V
3	0.0V	0.0V
4	5.0V	5.0V
5	0.0V	0.0V
6	0.0V	0.0V
7	0.0V	0.0V
8	0.0V	0.0V
9	0.0V	0.0V
10	5.0V	5.0V
11	0.0V	0.0V
12	0.0V	0.0V

IC505 [LB8110M]

PIN NO	PLAY BACK	RECORD
1	4.2V	4.4V
2	0.0V	0.0V
3	0.0V	0.0V
4	0.0V	2.0V
5	0.0V	0.0V
6	6.0V	2.0V
7	0.0V	0.0V
8	4.5V	5.0V
9	0.0V	2.2V
10	2.0V	0.0V
11	2.0V	2.2V
12	2.0V	2.2V
13	0.0V	0.0V
14	2.0V	2.0V
15	2.0V	2.0V
16	2.0V	2.0V
17	2.0V	2.0V
18	2.0V	2.0V
19	4.5V	5.0V
20	4.0V	4.2V
21	0.0V	0.0V
22	0.0V	0.4V
23	5.0V	0.0V
24	4.5V	4.8V
25	4.0V	0.0V
26	0.0V	3.8V
27	4.0V	0.0V
28	2.0V	2.6V
29	2.4V	2.6V
30	0.0V	4.0V
31	4.0V	3.8V
32	4.0V	4.0V
33	4.5V	4.6V
34	5.0V	5.0V
35	0.8V	0.8V
36	0.0V	0.0V

IC601 [CXA1204Q]

PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	4.0V	5.0V
3	0.0V	0.0V
4	0.0V	0.0V
5	0.0V	0.0V
6	2.6V	2.6V
7	0.0V	0.0V
8	2.6V	2.6V
9	0.0V	0.0V
10	1.4V	3.7V
11	2.6V	2.6V
12	2.4V	2.6V
13	0.0V	0.0V
14	2.2V	2.2V
15	0.0V	0.0V
16	5.0V	5.6V
17	0.0V	0.0V
18	0.0V	0.0V
19	0.0V	0.0V
20	5.0V	5.0V
21	4.0V	0.0V
22	0.0V	0.0V
23	4.0V	5.0V
24	1.7V	0.0V
25	3.0V	0.0V
26	0.0V	0.0V
27	5.0V	5.0V
28	5.0V	5.0V
29	0.0V	0.0V
30	1.4V	2.0V
31	2.6V	3.6V
32	2.6V	2.6V
33	2.6V	2.6V
34	0.0V	0.0V
35	1.4V	0.0V
36	2.6V	0.0V
37	0.0V	0.0V
38	0.0V	0.0V
39	1.8V	0.0V
40	0.0V	0.5V
41	0.0V	0.0V
42	0.0V	0.5V
43	1.4V	0.0V
44	3.0V	0.0V

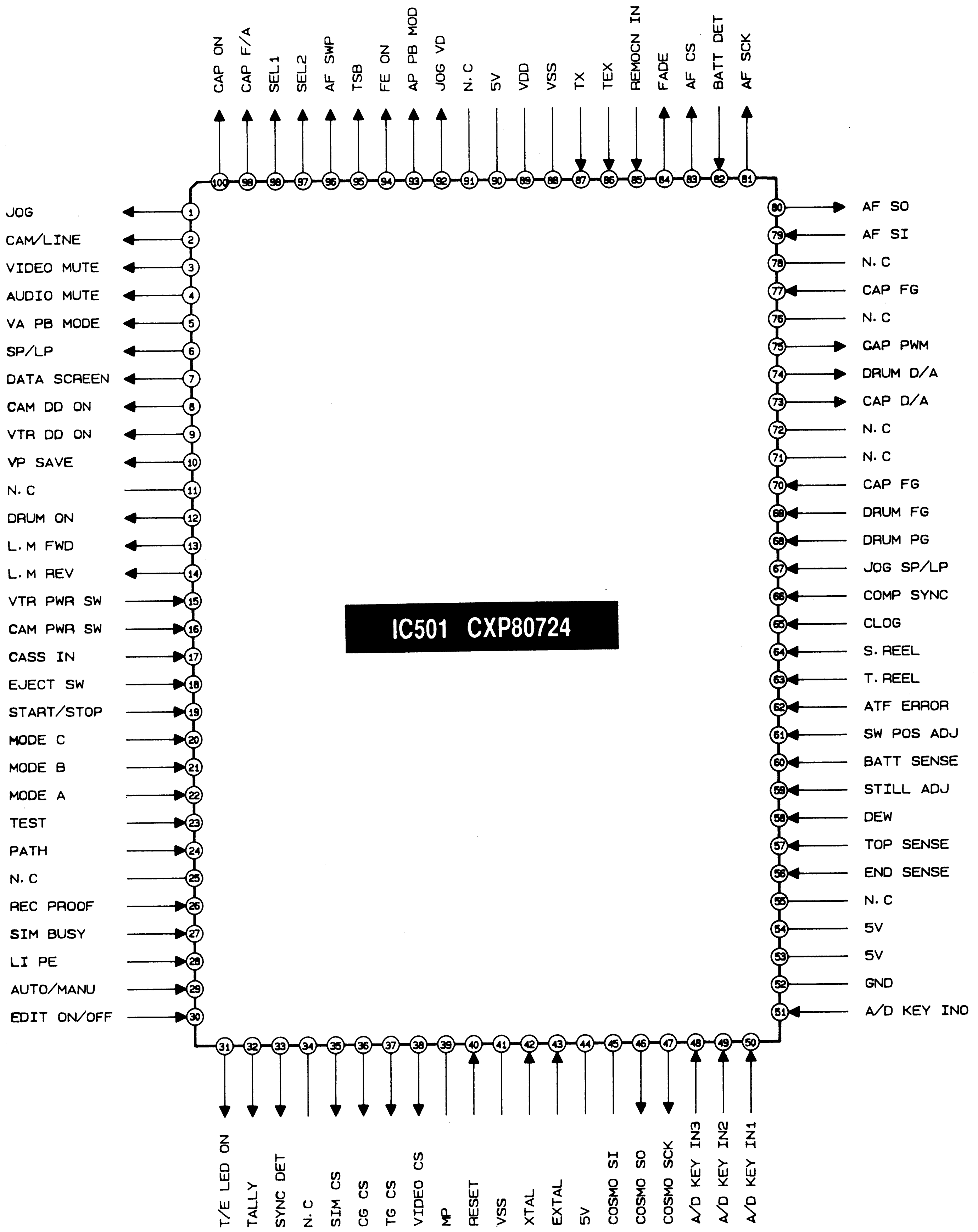
IC602 [CXA8006M]

PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	0.0V	0.0V
3	0.0V	0.0V
4	0.0V	0.0V
5	0.5V	0.5V
6	0.7V	1.5V
7	4.0V	5.0V
8	6.0V	5.0V
9	0.0V	5.0V
10	0.0V	0.0V
11	0.0V	0.0V
12	6.8V	6.8V
13	2.8V	1.4V
14	2.8V	1.8V
15	0.0V	0.0V
16	2.4V	1.4V
17	0.0V	0.0V
18	2.6V	1.4V
19	2.8V	1.4V
20	2.6V	1.4V
21	2.4V	1.4V
22	2.6V	1.4V
23	1.0V	0.8V
24	4.0V	0.0V
25	3.0V	3.0V
26	2.0V	2.4V
27	1.0V	4.8V
28	3.2V	3.2V
29	2.8V	0.0V
30	5.0V	5.0V

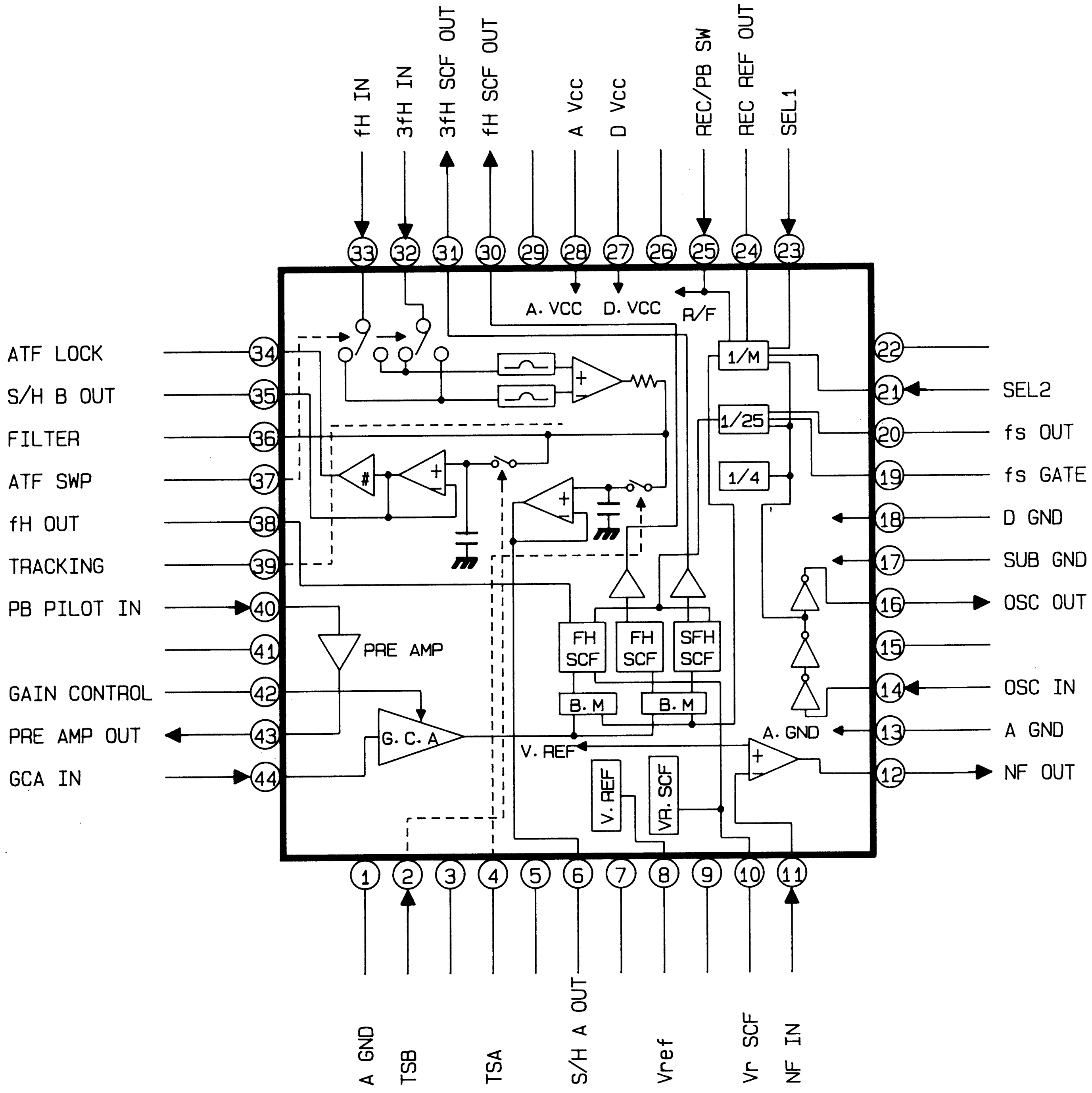
IC603 [LB1851M]

PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	0.0V	0.0V
3	1.4V	0.0V
4	2.0V	2.0V
5	7.0V	6.5V
6	5.0V	5.0V
7	4.0V	5.0V
8	0.8V	1.0V
9	0.0V	0.0V
10	0.0V	0.0V
11	0.0V	2.6V
12	4.2V	4.2V
13	4.5V	5.0V
14	0.0V	0.0V
15	0.0V	0.0V
16	0.0V	0.0V
17	0.0V	0.0V
18	4.0V	5.0V
19	0.0V	0.0V
20	1.4V	1.2V
21	1.4V	1.2V
22	2.6V	2.6V
23	2.6V	2.6V
24	4.0V	4.0V
25	4.0V	4.0V
26	0.0V	0.0V
27	1.4V	1.4V
28	1.4V	1.4V
29	0.0V	0.0V
30	0.0V	0.0V

IC501 CXP80724


CAP ON
CAP F/A
SEL1
SEL2
AF SWP
TSB
FE ON
AP PB MOD
JOG VD
N.C
5V
VDD
VSS
TX
TEX
REMOCN IN
FADE
AF CS
BATT DET
AF SCK
JOG
CAM/LINE
VIDEO MUTE
AUDIO MUTE
VA PB MODE
SP/LP
DATA SCREEN
CAM DD ON
VTR DD ON
VP SAVE
N.C
DRUM ON
L.M FWD
L.M REV
VTR PWR SW
CAM PWR SW
CASS IN
EJECT SW
START/STOP
MODE C
MODE B
MODE A
TEST
PATH
N.C
REC PROOF
SIM BUSY
LI PE
AUTO/MANU
EDIT ON/OFF
AF SO
AF SI
N.C
CAP FG
N.C
CAP PWM
DRUM D/A
CAP D/A
N.C
N.C
CAP FG
DRUM FG
DRUM PG
JOG SP/LP
COMP SYNC
CLOG
S.REEL
T.REEL
ATF ERROR
SW POS ADJ
BATT SENSE
STILL ADJ
DEW
TOP SENSE
END SENSE
N.C
5V
5V
GND
A/D KEY IN0
IC501 CXP80724
T/E LED ON
TALLY
SYNC DET
N.C
SIM CS
CG CS
TG CS
VIDEO CS
MP
RESET
VSS
XTAL
EXTAL
5V
COSMO SI
COSMO SO
COSMO SCK
A/D KEY IN3
A/D KEY IN2
A/D KEY IN1

IC601 CXA1204Q


fH IN
3fH IN
3fH SCF OUT
fH SCF OUT
A Vcc
D Vcc
REC/PB SW
REC REF OUT
SEL1
ATF LOCK
S/H B OUT
FILTER
ATF SWP
fH OUT
TRACKING
PB PILOT IN
GAIN CONTROL
PRE AMP OUT
GCA IN
A. VCC
D. VCC
R/F
1/M
1/25
1/4
PRE AMP
G. C. A
FH SCF
FH SCF
SFH SCF
B. M
B. M
V. REF
V. REF
VR. SCF
A. GND
SEL2
fs OUT
fs GATE
D GND
SUB GND
OSC OUT
OSC IN
A GND
NF OUT
A GND
TSB
TSA
S/H A OUT
Vref
Vr SCF
NF IN

10-4. Video

IC201 (CXA1201)		
PIN NO	PLAY BACK	RECORD
1	1.8V	1.8V
2	2.1V	2.1V
3	1.8V	1.8V
4	2.1V	2.1V
5	0.0V	0.0V
6	1.8V	1.8V
7	0.0V	0.0V
8	2.3V	2.3V
9	5.0V	5.0V
10	1.8V	1.8V
11	1.8V	1.8V
12	2.3V	2.3V
13	0.0V	0.0V
14	0.6V	0.6V
15	0.0V	0.0V
16	0.0V	0.0V
17	0.0V	0.0V
18	0.0V	0.0V
19	0.0V	0.0V
20	3.6V	3.8V
21	5.0V	5.0V
22	4.9V	4.9V
23	5.0V	5.0V
24	5.0V	5.0V
25	2.3V	2.3V
26	4.3V	4.4V
27	0.0V	0.0V
28	2.3V	2.4V
29	0.0V	0.0V
30	2.1V	2.1V
31	2.1V	2.1V
32	2.1V	2.1V

IC 202 (CXL1502)		
PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	2.4V	2.4V
3	1.0V	1.0V
4	2.6V	2.6V
5	2.1V	2.1V
6	0.0V	0.0V
7	4.9V	4.9V
8	0.0V	0.0V
9	0.0V	0.0V
10	1.8V	1.8V
11	0.8V	0.8V
12	1.8V	1.8V
13	0.0V	0.0V
14	0.6V	0.6V
15	1.8V	1.8V
16	0.0V	0.0V
17	0.0V	0.0V
18	1.8V	1.8V
19	4.9V	4.9V
20	1.1V	1.1V
21	0.0V	0.0V
22	0.0V	0.0V
23	0.0V	0.0V
24	0.0V	0.0V
25	2.4V	2.4V
26	4.9V	4.9V
27	2.4V	2.4V
28	2.4V	2.4V
29	0.0V	0.0V
30	2.4V	2.4V

IC 203 (CXA1200Q)		
PIN NO	PLAY BACK	RECORD
1	2.3V	2.3V
2	0.0V	0.0V
3	3.2V	0.5V
4	2.7V	2.0V
5	0.0V	2.5V
6	4.9V	4.9V
7	2.7V	2.7V
8	0.5V	0.5V
9	0.5V	1.6V
10	2.4V	2.3V
11	3.1V	3.1V
12	0.0V	0.0V
13	2.4V	2.4V
14	2.7V	2.7V
15	3.6V	3.6V
16	2.6V	2.6V
17	5.0V	5.0V
18	5.0V	5.0V
19	3.7V	3.7V
20	0.5V	0.5V
21	5.0V	5.0V
22	2.6V	2.5V
23	2.5V	2.5V
24	2.4V	2.4V
25	1.1V	2.5V
26	0.0V	0.0V
27	2.5V	2.5V
28	2.6V	2.5V
29	2.3V	2.4V
30	2.7V	2.8V
31	2.7V	2.8V
32	5.0V	5.0V
33	2.3V	2.4V
34	4.5V	4.9V
35	2.7V	2.8V
36	2.4V	2.4V
37	2.7V	2.8V
38	3.1V	3.2V
39	2.7V	2.8V
40	3.0V	3.1V
41	2.7V	2.7V
42	2.7V	2.7V
43	2.5V	2.7V
44	2.7V	2.7V
45	2.9V	2.8V
46	3.7V	3.8V
47	2.9V	2.8V
48	1.9	1.9V
49	2.7V	2.7V
50	5.0V	5.0V
51	2.3V	2.3V
52	2.4V	2.3V
53	1.8V	1.8V
54	2.6V	2.6V
55	5.0V	5.0V
56	2.5V	0.5V
57	2.8V	0.5V
58	0.0V	0.0V
59	3.7V	3.3V
60	3.0V	3.3V
61	2.6V	2.5V
62	0.0V	0.0V
63	2.7V	2.7V
64	5.0V	5.0V

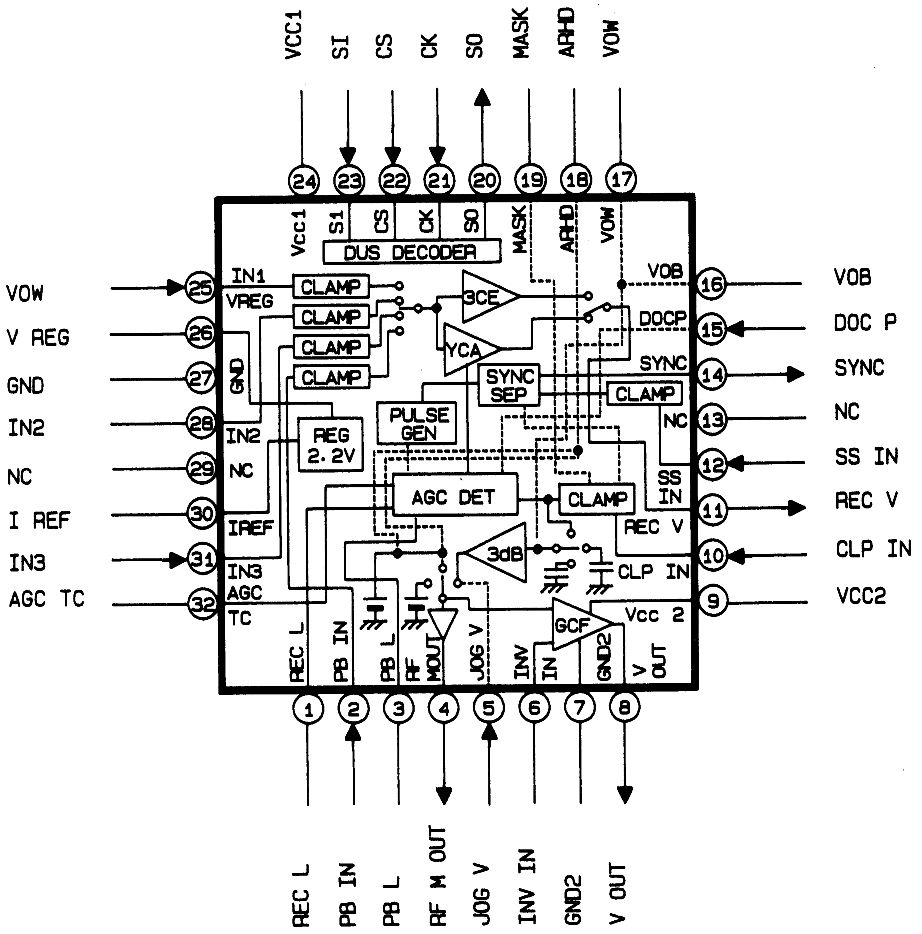
IC204 (CXA1203)		
PIN NO	PLAY BACK	RECORD
1	4.5V	1.1V
2	2.5V	1.9V
3	0.0V	0.0V
4	2.6V	1.0V
5	2.5V	0.0V
6	0.0V	0.0V
7	2.2V	0.0V
8	2.6V	0.0V
9	2.1V	0.5V
10	1.1V	0.5V
11	0.3V	0.2V
12	0.0V	0.0V
13	4.3V	0.0V
14	2.2V	0.0V
15	2.2V	0.0V
16	2.6V	0.7V
17	4.5V	0.4V
18	0.1V	0.1V
19	4.5V	0.1V
20	0.0V	0.0V
21	2.3V	0.7V
22	3.3V	0.7V
23	4.5V	1.1V
24	1.5V	0.0V

IC205 (MB90077)		
PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	4.5V	4.5V
3	0.3V	0.3V
4	4.2V	4.2V
5	5.0V	5.0V
6	5.1V	5.1V
7	2.2V	2.2V
8	2.2V	2.2V
9	2.2V	2.2V
10	0.0V	0.0V
11	0.0V	0.0V
12	0.0V	0.0V
13	0.0V	0.0V
14	0.0V	0.0V
15	0.0V	0.0V
16	0.0V	0.0V
17	0.0V	0.0V
18	5.0V	5.0V
19	4.6V	4.6V
20	0.0V	0.0V

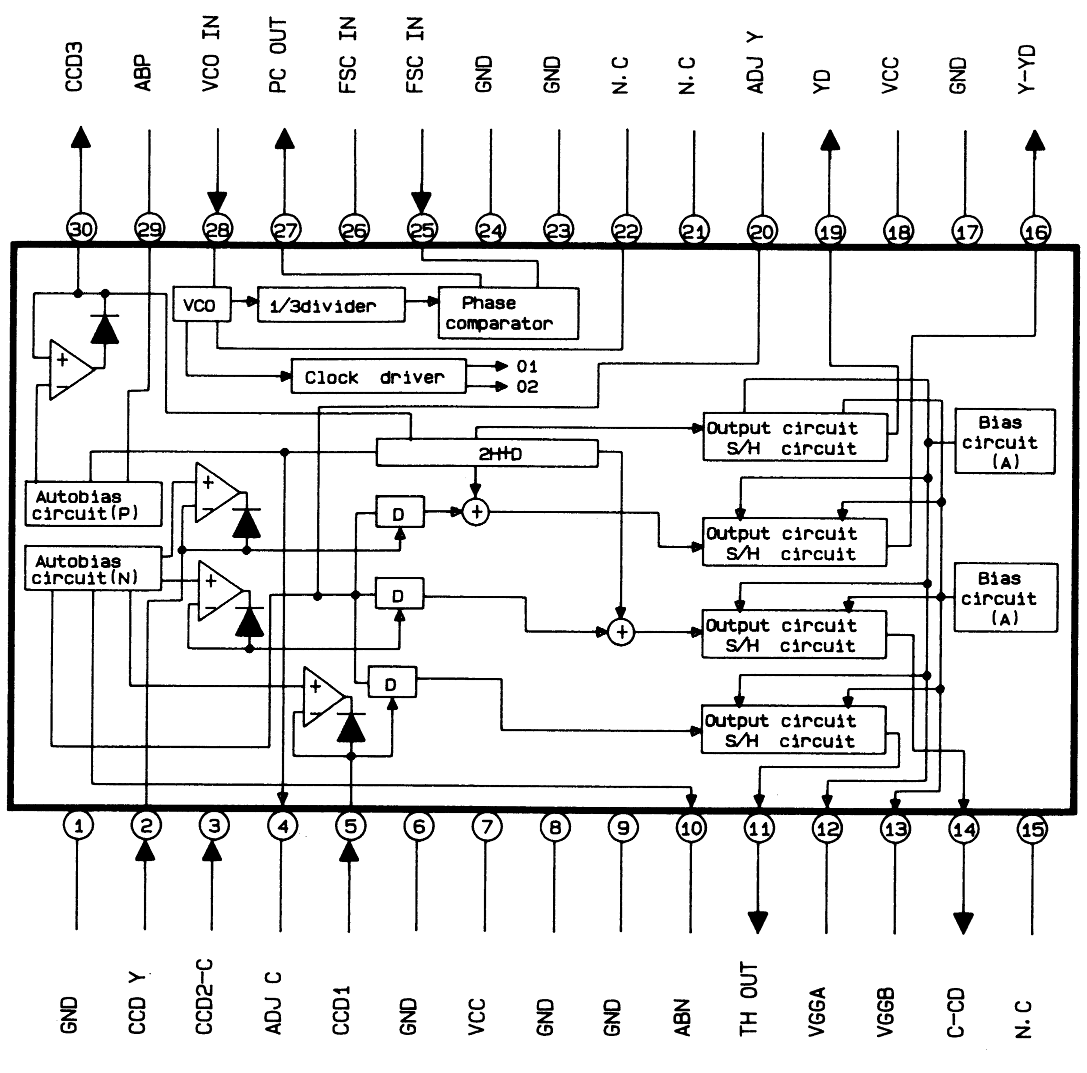
IC206 (BA7046F)		
PIN NO	PLAY BACK	RECORD
1	2.1V	2.1V
2	LOW:0.1V HIGH:5.0V	LOW:0.1V HIGH:5.0V
3	0.0V	0.0V
4	LOW:0.1V HIGH:5.0V	LOW:0.1V HIGH:5.0V
5	0.0V	0.0V
6	2.2V	2.2V
7	5.0V	5.0V
8	2.3V	2.3V

IC207 (MSM5258)		
PIN NO	PLAY BACK	RECORD
1	0.0V	0.0V
2	0.0V	0.0V
3	0.0V	0.0V
4	5.0V	5.0V
5	0.0V	0.0V
6	3.7V	3.7V
7	3.7V	3.7V
8	5.0V	5.0V

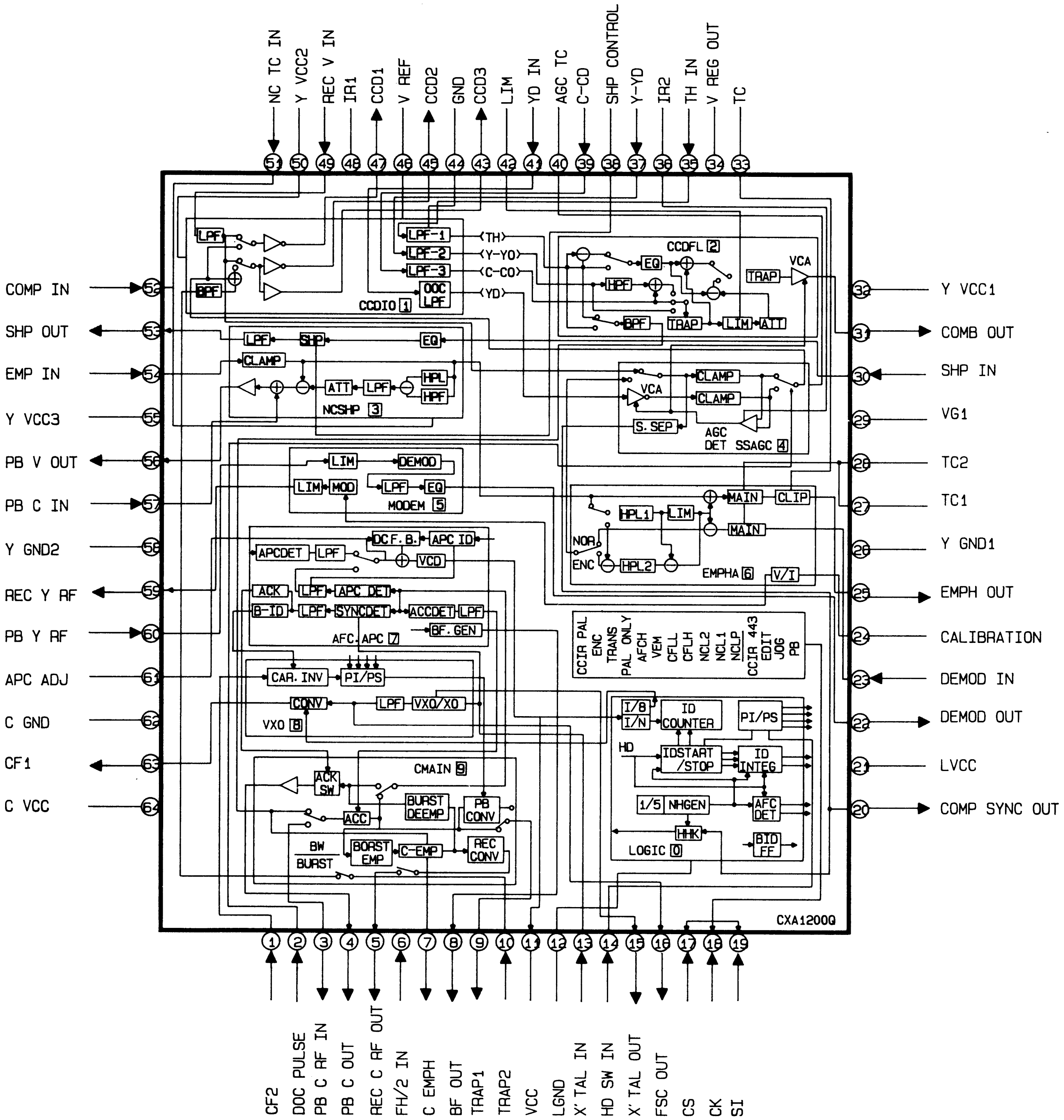
IC201 CXA1201BQ

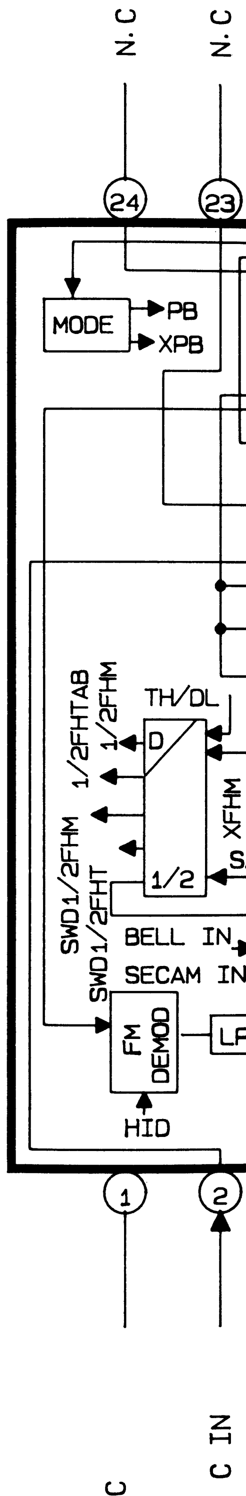

VCC1
SI
CS
CK
SO
MASK
ARHD
VOW
24
23
22
21
20
19
18
17
Vcc1
S1
CS
CK
SO
DUS DECODER
MASK
ARHD
VOW
VOW
V REG
GND
IN2
NC
I REF
IN3
AGC TC
25
26
27
28
29
30
31
32
IN1
VREG
GND
IN2
NC
IREF
IN3
AGC
TC
CLAMP
CLAMP
CLAMP
CLAMP
3CE
YCA
SYNC SEP
PULSE GEN
REG 2.2V
AGC DET
CLAMP
CLAMP
3dB
GCF
VOB
DOCP
SYNC
NC
SS IN
REC V
CLP IN
Vcc 2
16
15
14
13
12
11
10
9
VOB
DOC P
SYNC
NC
SS IN
REC V
CLP IN
VCC2
REC L
PB IN
PB L
RF MOUT
JOG V
INV IN
GND2
V OUT
1
2
3
4
5
6
7
8
REC L
PB IN
PB L
RF M OUT
JOG V
INV IN
GND2
V OUT

IC201 CXL1502

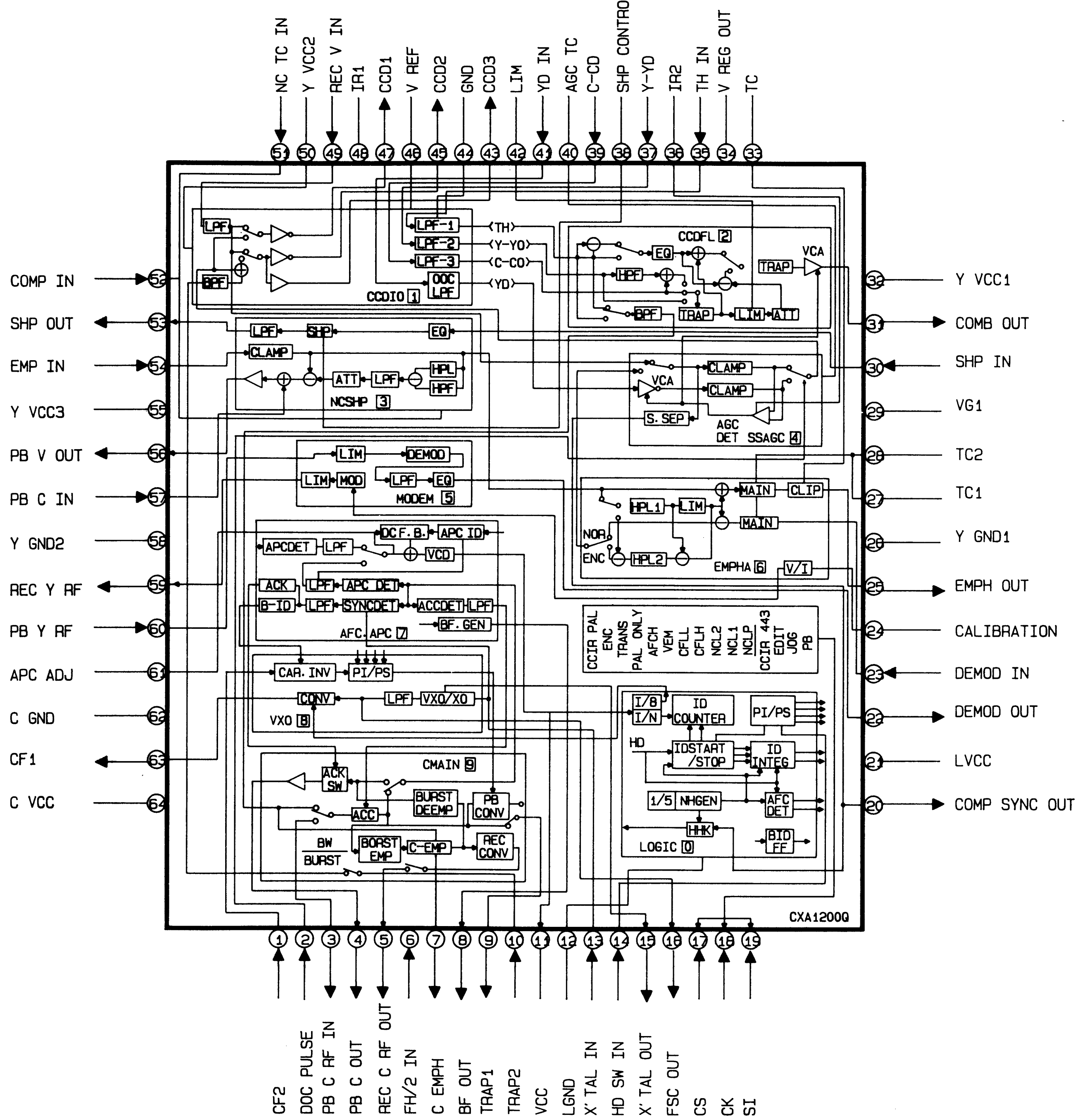

CCD3
ABP
VCO IN
PC OUT
FSC IN
FSC IN
GND
GND
N.C
N.C
ADJ Y
YD
VCC
GND
Y-YD
VCO
1/3divider
Phase comparator
Clock driver
01
02
Output circuit S/H circuit
Bias circuit (A)
2H+D
Autobias circuit(P)
Autobias circuit(N)
D
GND
CCD Y
CCD2-C
ADJ C
CCD1
GND
VCC
GND
GND
ABN
TH OUT
VGGA
VGGB
C-CD
N.C

IC203 CXA1200BQ


NC TC IN
Y VCC2
REC V IN
IR1
CCD1
V REF
CCD2
GND
CCD3
LIM
YD IN
AGC TC
C-CD
SHP CONTROL
Y-YD
IR2
TH IN
V REG OUT
TC
COMP IN
SHP OUT
EMP IN
Y VCC3
PB V OUT
PB C IN
Y GND2
REC Y RF
PB Y RF
APC ADJ
C GND
CF1
C VCC
Y VCC1
COMB OUT
SHP IN
VG1
TC2
TC1
Y GND1
EMPH OUT
CALIBRATION
DEMOD IN
DEMOD OUT
LVCC
COMP SYNC OUT
LPF-1
LPF-2
LPF-3
DOC LPF
CCDIO 1
CCDFL 2
NCSHP 3
AGC DET SSAGC 4
MODEM 5
EMPHA 6
AFC. APC 7
VXO 8
CMAIN 9
LOGIC 0
CXA1200Q
CF2
DOC PULSE
PB C RF IN
PB C OUT
REC C RF OUT
FH/2 IN
C EMPH
BF OUT
TRAP1
TRAP2
VCC
LGND
X'TAL IN
HD SW IN
X'TAL OUT
FSC OUT
CS
CK
SI

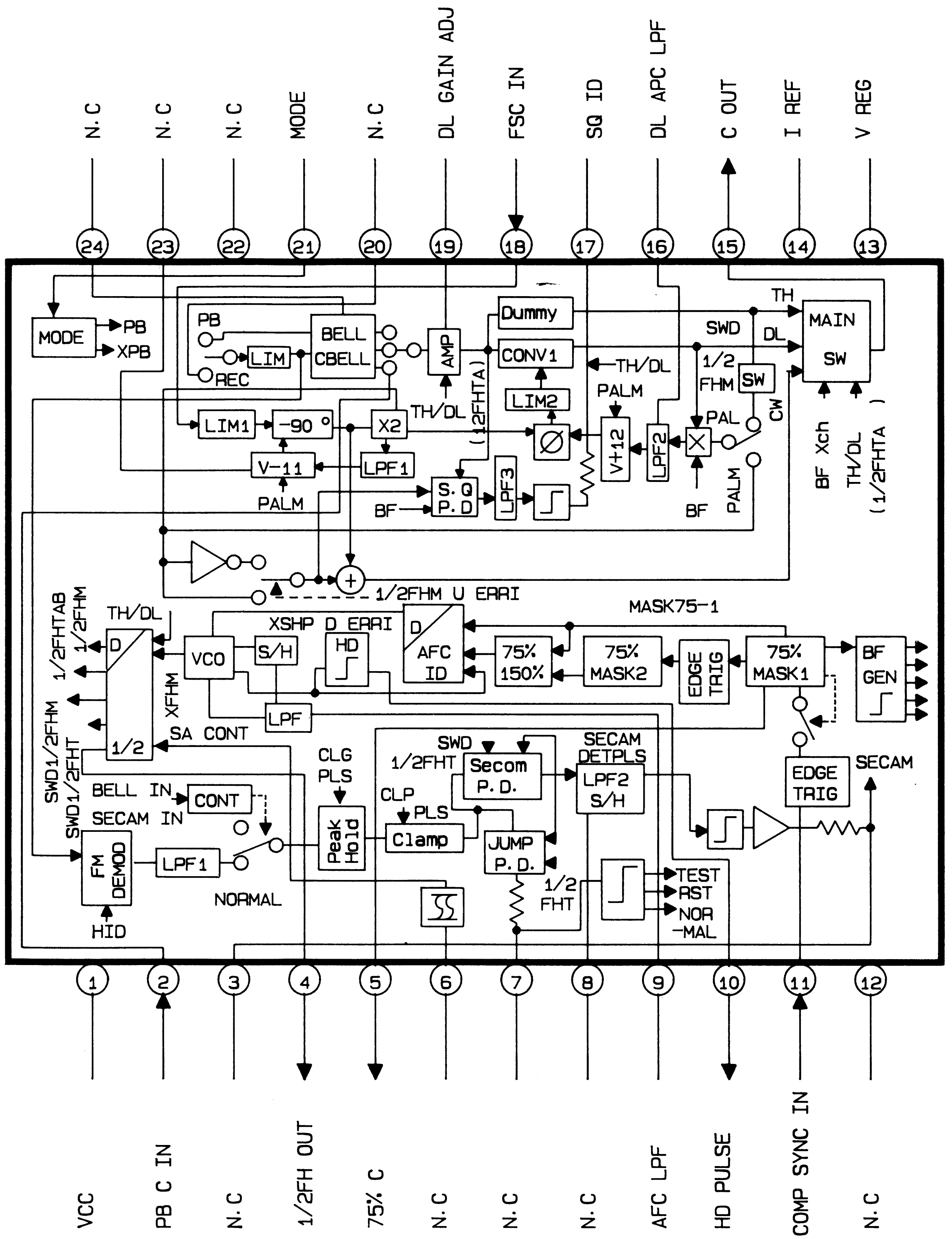

N.C
N.C
MODE
PB
XPB
TH/DL
1/2FHTAB
1/2FHM
D
XFHM
1/2
SWD1/2FHM
SWD1/2FHT
BELL IN
SECAM IN
FM DEMOD
HID
VCC
PB C IN

IC203 CXA1200BQ



NC TC IN
Y VCC2
REC V IN
IR1
CCD1
V REF
CCD2
GND
CCD3
LIM
YD IN
AGC TC
C-CD
SHP CONTROL
Y-YD
IR2
TH IN
V REG OUT
TC
COMP IN
SHP OUT
EMP IN
Y VCC3
PB V OUT
PB C IN
Y GND2
REC Y RF
PB Y RF
APC ADJ
C GND
CF1
C VCC
Y VCC1
COMB OUT
SHP IN
VG1
TC2
TC1
Y GND1
EMPH OUT
CALIBRATION
DEMOD IN
DEMOD OUT
LVCC
COMP SYNC OUT
CF2
DOC PULSE
PB C RF IN
PB C OUT
REC C RF OUT
FH/2 IN
C EMPH
BF OUT
TRAP1
TRAP2
VCC
LGND
X'TAL IN
HD SW IN
X'TAL OUT
FSC OUT
CS
CK
SI
LPF
BPF
LPF-1
LPF-2
LPF-3
(TH)
(Y-YO)
(C-CO)
(YD)
DOC LPF
CCDIO 1
CCDFL 2
EQ
HPF
TRAP
LIM
ATT
VCA
SHP
CLAMP
HPL
NCSHP 3
S.SEP
AGC DET
SSAGC 4
DEMOD
MOD
MODEM 5
HPL1
MAIN
CLIP
NOR
ENC
HPL2
EMPHA 6
V/I
DCF.B.
APC ID
APCDET
VCO
ACK
APC DET
B-ID
SYNCDET
ACCDET
BF.GEN
AFC.APC 7
CCIR PAL
ENC
TRANS
PAL ONLY
AFCH
VEM
CFLL
CFLH
NCL2
NCL1
NCLP
CCIR 443
EDIT
JOG
PB
CAR.INV
PI/PS
CONV
VXO/XO
VXO 8
I/8
I/N
ID COUNTER
HD
IDSTART /STOP
ID INTEG
1/5
NHGEN
AFC DET
HHK
BID FF
LOGIC 0
CMAIN 9
ACK SW
ACC
BURST DEEMP
PB CONV
BW
BURST
BURST EMP
C-EMP
REC CONV
CXA1200Q

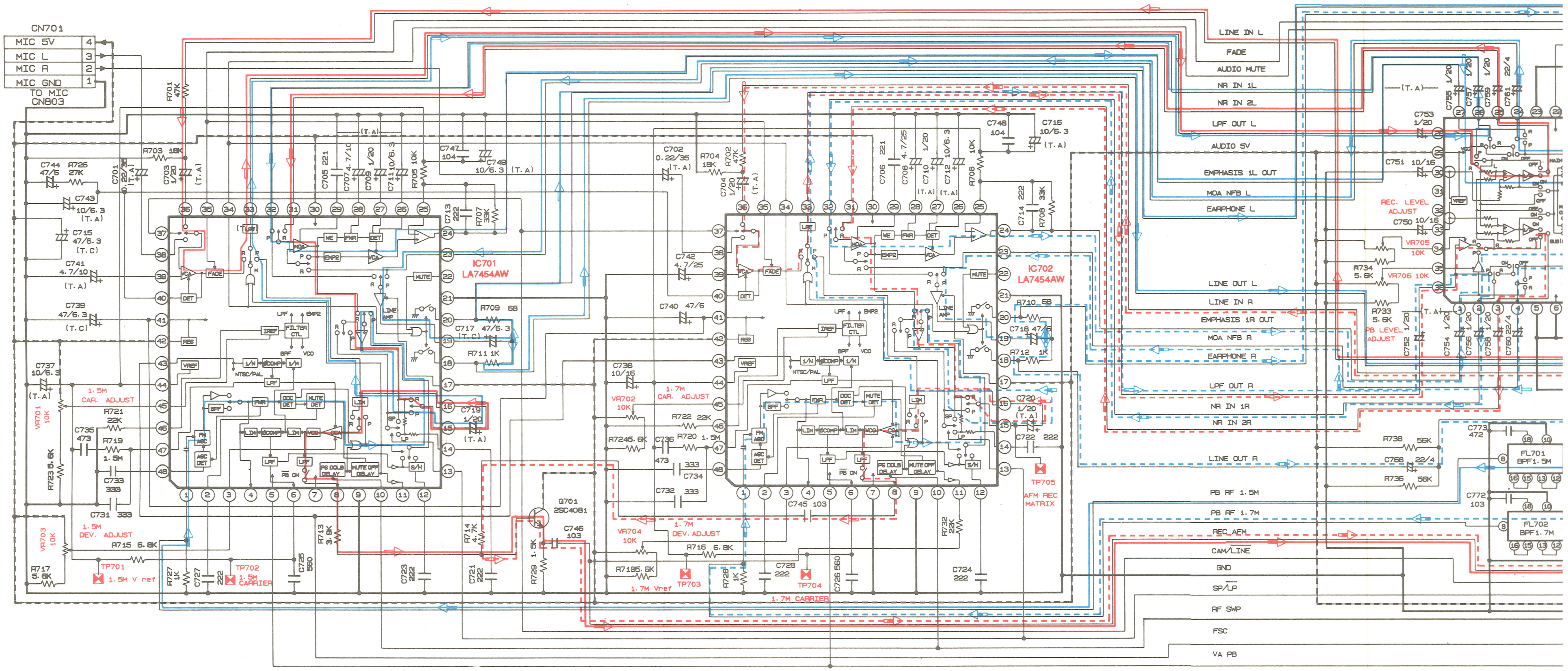
IC204 CXA1203N

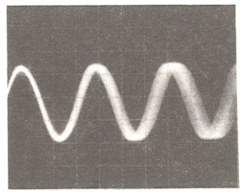


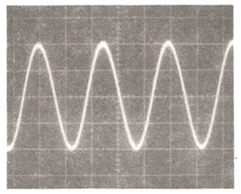
N.C
N.C
N.C
MODE
N.C
DL GAIN ADJ
FSC IN
SQ ID
DL APC LPF
C OUT
I REF
V REG
VCC
PB C IN
N.C
1/2FH OUT
75% C
N.C
N.C
N.C
AFC LPF
HD PULSE
COMP SYNC IN
N.C
MODE
PB
XPB
PB
LIM
REC
BELL
CBELL
AMP
Dummy
CONV1
TH/DL
TH
SWD
DL
MAIN SW
1/2 FHM
SW
PAL
CW
PALM
LIM2
LIM1
-90°
X2
V-11
LPF1
TH/DL
(1/2FHTA)
S.Q P.D
LPF3
V+12
LPF2
BF
PALM
BF
BF Xch
TH/DL
(1/2FHTA)
1/2FHM U ERRI
MASK75-1
TH/DL
XSHP D ERRI
HD
VCO
S/H
D AFC ID
75% 150%
75% MASK2
EDGE TRIG
75% MASK1
BF GEN
1/2FHTAB
1/2FHM
SWD1/2FHM
SWD1/2FHT
D
1/2
XFHM
SA CONT
LPF
CLG PLS
Peak Hold
SWD
1/2FHT
Secom P.D.
SECAM DETPLS
LPF2 S/H
BELL IN
CONT
SECAM IN
CLP PLS
Clamp
JUMP P.D.
1/2 FHT
EDGE TRIG
SECAM
FM DEMOD
LPF1
NORMAL
HID
TEST
RST
NOR-MAL

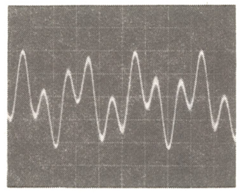
10-5. Audio

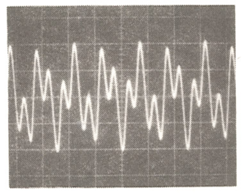
GND
VCC
RED LINE L REC PROCESS
LINE R REC PROCESS
BLUE PB L PROCESS
PB R PROCESS

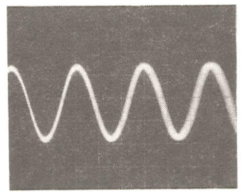

CN701
MIC 5V 4
MIC L 3
MIC R 2
MIC GND 1
TO MIC CN803
IC701 LA7454AW
IC702 LA7454AW
Q701 2SC4081
R701 47K
R703 18K
C744 47/6
R726 27K
C743 10/6.3
C715 47/6.3
C741 4.7/10
C739 47/6.3
C737 10/6.3
VR701 10K
1.5M CAR. ADJUST
R721 22K
C735 473
R719 1.5M
R723 5.6K
C733 333
C731 333
VR703 10K
1.5M DEV. ADJUST
R715 6.8K
R717 5.6K
TP701 1.5M V ref
TP702 1.5M CARRIER
R727 1K
C727 222
C725 560
C723 222
C721 222
R713 3.9K
R714 4.7K
R729 1.5K
C746 103
C705 221
C707 4.7/10
C709 1/20
C711 10/6.3
R705 10K
C747 104
C749 10/6.3
C713 222
R707 33K
R709 68
C717 47/6.3
R711 1K
C719 1/20
C702 0.22/35
R704 18K
R702 47K
C704 1/20
C742 4.7/25
C740 47/6
C738 10/16
VR702 10K
1.7M CAR. ADJUST
R722 22K
R724 5.6K
C736 473
R720 1.5M
C734 333
C732 333
C745 103
VR704 10K
1.7M DEV. ADJUST
R716 6.8K
R718 5.6K
1.7M Vref
TP703
R728 1K
C728 222
TP704
C726 560
1.7M CARRIER
C706 221
C708 4.7/25
C710 1/20
C712 10/6.3
R706 10K
C748 104
C716 10/6.3
C714 222
R708 33K
R710 68
C718 47/6
R712 1K
C720 1/20
C722 222
C724 222
R732 22K
TP705 AFM REC MATRIX
LINE IN L
FADE
AUDIO MUTE
NR IN 1L
NR IN 2L
LPF OUT L
AUDIO 5V
EMPHASIS 1L OUT
MOA NFB L
EARPHONE L
LINE OUT L
LINE IN R
EMPHASIS 1R OUT
MOA NFB R
EARPHONE R
LPF OUT R
NR IN 1R
NR IN 2R
LINE OUT R
PB RF 1.5M
PB RF 1.7M
REC AFM
CAM/LINE
GND
SP/LP
RF SWP
FSC
VA PB
C753 1/20
C751 10/16
REC. LEVEL ADJUST
C750 10/16
VR705 10K
R734 5.6K
VR706 10K
R733 5.6K
PB LEVEL ADJUST
C752 1/20
C754 1/20
C756 1/20
C758 1/20
C760 22/4
C755 1/20
C757 1/20
C759 1/20
C761 22/4
R738 56K
C768 22/4
R736 56K
C773 472
FL701 BPF1.5M
C772 103
FL702 BPF1.7M
(T.A)
(T.C)

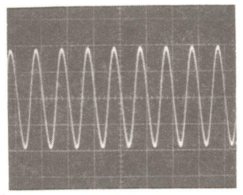

IC701-8
REC
350mVp-p


IC701-23
PB
400mVp-p


IC701/IC702-24
REC
400mVp-p


IC701/IC702-24
PB
400mVp-p

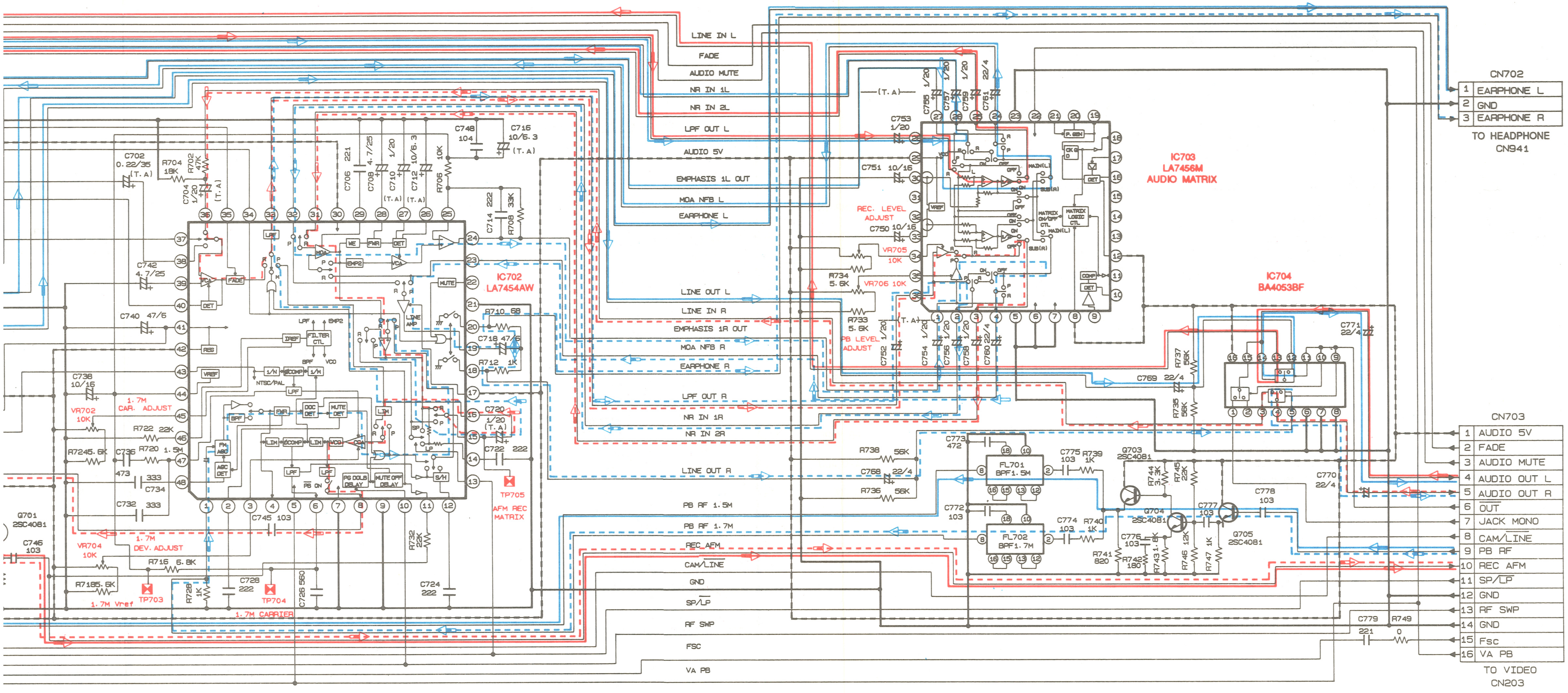

IC702-8
REC
350mVp-p

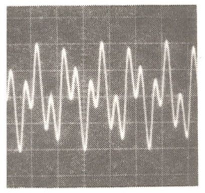

IC702-23
PB
400mVp-p

AUDIO

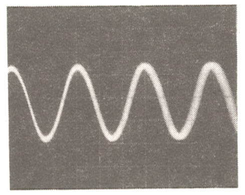
AUDIO

LINE L REC PROCESS
LINE R REC PROCESS
BLUE
PB L PROCESS
PB R PROCESS

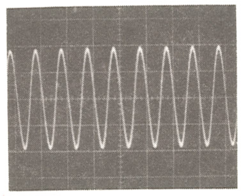

LINE IN L
FADE
AUDIO MUTE
NR IN 1L
NR IN 2L
LPF OUT L
AUDIO 5V
EMPHASIS 1L OUT
MOA NFB L
EARPHONE L
LINE OUT L
LINE IN R
EMPHASIS 1R OUT
MOA NFB R
EARPHONE R
LPF OUT R
NR IN 1R
NR IN 2R
LINE OUT R
PB RF 1.5M
PB RF 1.7M
REC AFM
CAM/LINE
GND
SP/LP
RF SWP
FSC
VA PB
IC702
LA7454AW
IC703
LA7456M
AUDIO MATRIX
IC704
BA4053BF
CN702
1 EARPHONE L
2 GND
3 EARPHONE R
TO HEADPHONE
CN941
CN703
1 AUDIO 5V
2 FADE
3 AUDIO MUTE
4 AUDIO OUT L
5 AUDIO OUT R
6 OUT
7 JACK MONO
8 CAM/LINE
9 PB RF
10 REC AFM
11 SP/LP
12 GND
13 RF SWP
14 GND
15 Fsc
16 VA PB
TO VIDEO
CN203
FL701
BPF1.5M
FL702
BPF1.7M
Q701
2SC4081
Q703
2SC4081
Q704
2SC4081
Q705
2SC4081
TP703
1.7M Vref
TP704
1.7M CARRIER
TP705
AFM REC
MATRIX
VR702
10K
1.7M
CAR. ADJUST
VR704
10K
1.7M
DEV. ADJUST
VR705
10K
REC. LEVEL
ADJUST
VR706 10K
PB LEVEL
ADJUST
C702
0.22/35
(T.A)
R704
18K
R702
47K
C704
1/20
(T.A)
C742
4.7/25
C740 47/6
C738
10/16
R722 22K
R724 5.6K
C736
473
R720 1.5M
C734
333
C732 333
C745 103
C746
103
R716 6.8K
R718 5.6K
R728
1K
C728
222
C726 560
C724
222
R732
22K
C706 221
C708 4.7/25
C710 1/20
C712 10/6.3
R706 10K
C748
104
C716
10/6.3
(T.A)
C714 222
R708 33K
R710 68
C718 47/6
R712 1K
C720
1/20
(T.A)
C722 222
C753
1/20
C755 1/20
C757 1/20
C759 1/20
C761 22/4
(T.A)
C751 10/16
C750 10/16
R734
5.6K
R733
5.6K
C752 1/20
C754 1/20
C756 1/20
C758 1/20
C760 22/4
(T.A)
C769 22/4
R737
56K
R735
56K
C771
22/4
R738 56K
C768 22/4
R736 56K
C773
472
C772
103
C775 103
R739 1K
C774 103
R740 1K
R744
3.3K
R745
22K
R743 1.8K
R741
820
R742
180
C776
103
R746 12K
R747 1K
C777
103
C778
103
C770
22/4
C779
221
R749
0
LPF
FADE
DET
VCA
REG
VREF
IREF
FILTER
CTL
EMP2
BPF
VCO
1/N
ØCOMP
NTSC/PAL
MUTE
LINE
AMP
ME
PWR
DOC
DET
MUTE
DET
FM
AGC
AGC
DET
LIM
VCO
PB ON
PG DOLBS
DELAY
MUTE OFF
DELAY
S/H
P.GEN
CK B
MATRIX
ON/OFF
CTL
MATRIX
LOGIC
CTL
MAIN(L)
MAIN(R)
SUB(R)
SUB(L)
COMP
DET
ON
OFF



1/IC702-24
Vp-p



IC702-8
REC
350mVp-p



IC702-23
PB
400mVp-p

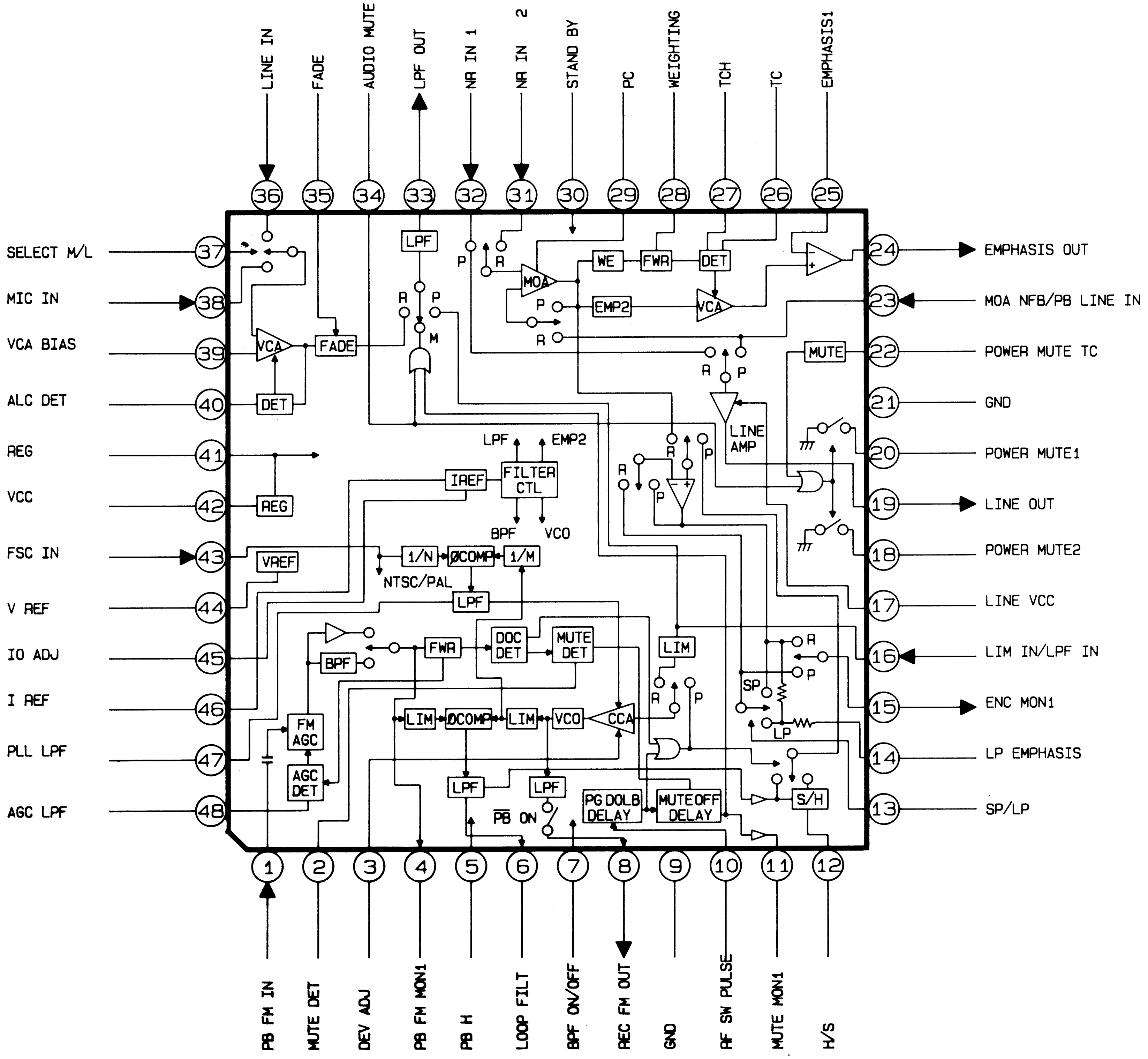
SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

IC701(IC702) (LA7454W)		
PIN NO	RECORD	PLAY BACK
1	0.0V	0.0V
2	0.0V	0.8V
3	DEV ADJ	DEV ADJ
4	3.0V	1.2V
5	0.0V	4.9V
6	2.1V	1.9V
7	2.5V(0.0V)	2.5V(0.0V)
8	2.1V	1.5V
9	0.0V	0.0V
10	2.4V	2.4V
11	0.0V	0.0V
12	0.0V	1.9V
13	5.0V	5.0V
14	2.1V	1.9V
15	2.1V	1.9V
16	2.1V	2.1V
17	4.9V	4.9V
18	0.0V	0.0V
19	2.4V	2.4V
20	0.0V	0.0V
21	0.0V	0.0V
22	4.9V	4.9V
23	2.1V	2.1V
24	2.1V	2.1V
25	2.1V	2.1V
26	2.0V	2.0V
27	2.6V	2.6V
28	2.0V	2.0V
29	2.8V	2.8V
30	4.9V	4.9V
31	2.1V	2.1V
32	2.1V	2.1V
33	2.1V	2.1V
34	0.0V	0.0V
35	0.0V	0.0V
36	2.1V	2.1V
37	0.0V	0.0V
38	2.1V	2.1V
39	2.1V	2.1V
40	1.7V	1.5V
41	4.2V	4.2V
42	4.9V	4.9V
43	3.2V	3.2V
44	2.1V	2.1V
45	CAR ADJ	CAR ADJ
46	2.1V	2.1V
47	0.5V	0.0V
48	0.0V	1.1V

IC703 (LA7456M)		
PIN NO	RECORD	PLAY BACK
1	2.4V	2.4V
2	2.4V	2.4V
3	2.4V	2.4V
4	2.4V	2.4V
5	0.0V	0.0V
6	0.0V	0.0V
7	0.0V	0.0V
8	4.9	4.9V
9	3.1V	3.1V
10	3.0V	0.2V
11	0.0V	4.1V
12	4.9V	4.9V
13	0.0V	0.0V
14	0.0V	0.0V
15	0.0V	0.0V
16	0.1V	0.4V
17	0.2V	2.5V
18	4.1V	4.1V
19	0.0V	0.0V
20	0.0V	0.0V
21	0.0V	0.0V
22	0.0V	4.8V
23	0.0V	0.0V
24	2.4V	2.4V
25	2.4V	2.4V
26	2.4V	2.4V
27	2.4V	2.4V
28	2.4V	2.4V
29	4.9V	4.9V
30	2.4V	2.4V
31	0.0V	0.0V
32	0.0V	0.0V
33	2.4V	2.4V
34	3.1V	3.1V
35	3.1V	3.1V
36	2.4V	2.4V

IC701/IC702 LA7454AW


LINE IN
FADE
AUDIO MUTE
LPF OUT
NR IN 1
NR IN 2
STAND BY
PC
WEIGHTING
TCH
TC
EMPHASIS1
SELECT M/L
MIC IN
VCA BIAS
ALC DET
REG
VCC
FSC IN
V REF
IO ADJ
I REF
PLL LPF
AGC LPF
EMPHASIS OUT
MOA NFB/PB LINE IN
POWER MUTE TC
GND
POWER MUTE1
LINE OUT
POWER MUTE2
LINE VCC
LIM IN/LPF IN
ENC MON1
LP EMPHASIS
SP/LP
PB FM IN
MUTE DET
DEV ADJ
PB FM MON1
PB H
LOOP FILT
BPF ON/OFF
REC FM OUT
GND
RF SW PULSE
MUTE MON1
H/S
LPF
MOA
WE
FWR
DET
EMP2
VCA
FADE
MUTE
LINE AMP
FILTER CTL
IREF
REG
VREF
1/N
ØCOMP
1/M
NTSC/PAL
BPF
VCO
FWR
DOC DET
MUTE DET
LIM
FM AGC
AGC DET
CCA
PG DOLB DELAY
MUTE OFF DELAY
S/H
PB ON
SP
LP
R
P
M
36
35
34
33
32
31
30
29
28
27
26
25
37
38
39
40
41
42
43
44
45
46
47
48
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

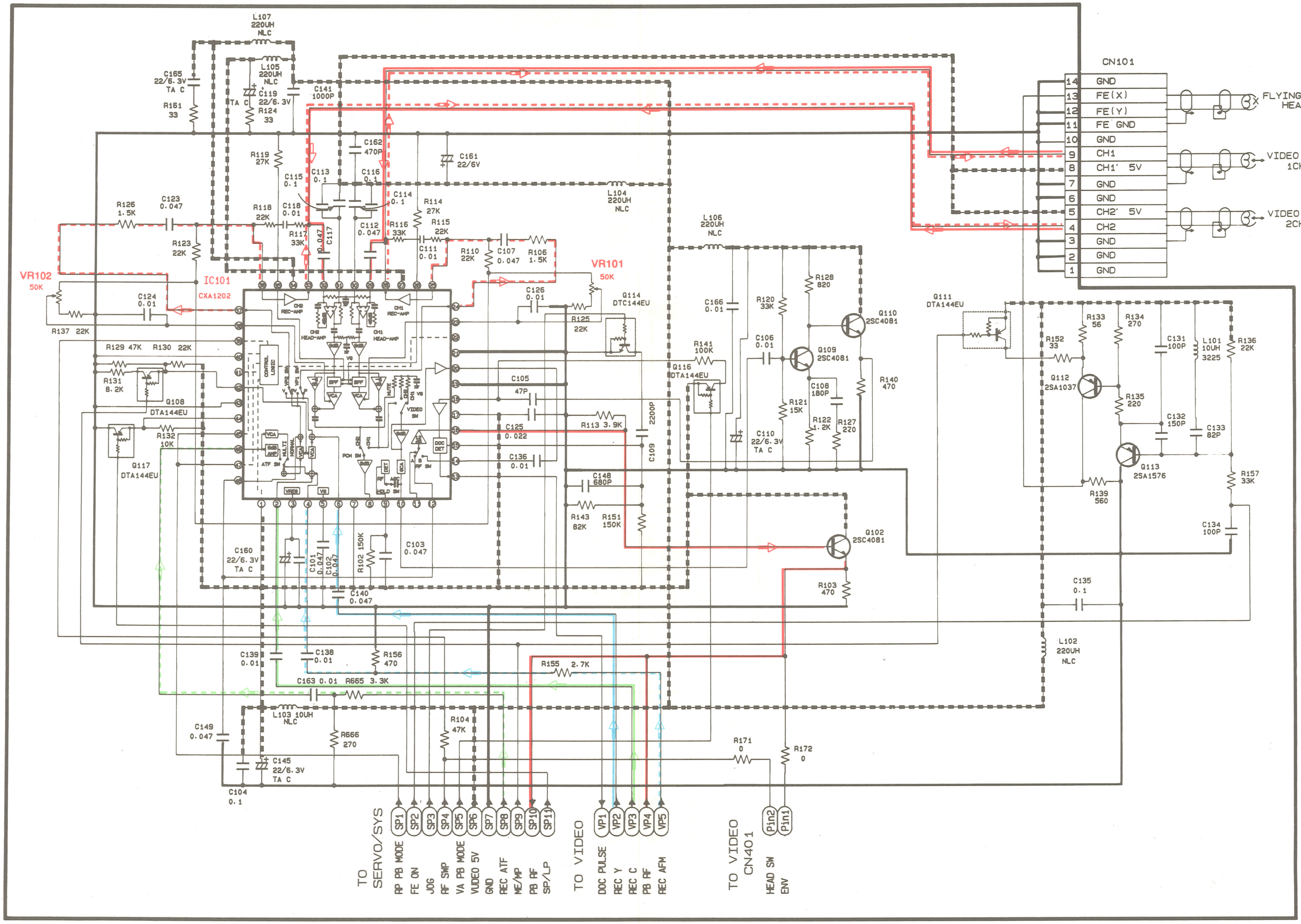
10-6. Pre-Amp

——— GND
- - - VCC

RED
——— PB Y/C+AUDIO+ATF PROCESS
- - - REC Y/C+AUDIO+ATF PROCESS

BLUE
——— REC Y PROCESS
- - - REC AUDIO PROCESS

GREEN
——— REC C PROCESS
- - - REC ATF PROCESS


L107 220UH NLC
L105 220UH NLC
C165 22/6.3V TA C
C119 22/6.3V TA C
C141 1000P
R151 33
R124 33
C162 470P
C161 22/6V
R119 27K
C115 0.1
C113 0.1
C116 0.1
C114 0.1
R114 27K
R126 1.5K
C123 0.047
R118 22K
C118 0.01
R117 33K
C117 0.047
C112 0.047
R116 33K
R115 22K
C111 0.01
R110 22K
C107 0.047
R106 1.5K
L104 220UH NLC
L106 220UH NLC
R123 22K
VR102 50K
IC101 CXA1202
VR101 50K
C124 0.01
R137 22K
C126 0.01
R125 22K
Q114 DTC144EU
C166 0.01
R120 33K
R128 820
Q110 2SC4081
C106 0.01
Q109 2SC4081
R141 100K
Q116 DTA144EU
C108 180P
R140 470
R121 15K
R122 1.2K
R127 270
C110 22/6.3V TA C
R129 47K
R130 22K
R131 8.2K
Q108 DTA144EU
R132 10K
Q117 DTA144EU
C105 47P
C125 0.022
R113 3.9K
C109 2200P
C136 0.01
C148 680P
R143 82K
R151 150K
Q102 2SC4081
R103 470
C160 22/6.3V TA C
C101 0.047
C102 0.047
R102 150K
C103 0.047
C140 0.047
CH2 REC-AMP
CH1 REC-AMP
CH2 HEAD-AMP
CH1 HEAD-AMP
CONTROL LOGIC
VIDEO SW
DOC DET
ATF SW
PCM SW
HOLD SW
RF SW
CN101
14 GND
13 FE(X)
12 FE(Y)
11 FE GND
10 GND
9 CH1
8 CH1' 5V
7 GND
6 GND
5 CH2' 5V
4 CH2
3 GND
2 GND
1 GND
FLYING EREASE HEAD
VIDEO HEAD 1CH
VIDEO HEAD 2CH
Q111 DTA144EU
R133 56
R134 270
R152 33
C131 100P
L101 10UH 3225
R136 22K
Q112 2SA1037
R135 220
C132 150P
C133 82P
Q113 2SA1576
R139 560
R157 33K
C134 100P
C135 0.1
L102 220UH NLC
C139 0.01
C138 0.01
R156 470
C163 0.01
R665 3.3K
R155 2.7K
L103 10UH NLC
R104 47K
R666 270
C149 0.047
C145 22/6.3V TA C
C104 0.1
R171 0
R172 0
TO SERVO/SYS
SP1 RP PB MODE
SP2 FE ON
SP3 JOG
SP4 RF SWP
SP5 VA PB MODE
SP6 VIDEO 5V
SP7 GND
SP8 REC ATF
SP9 ME/MP
SP10 PB RF
SP11 SP/LP
TO VIDEO
VP1 DOC PULSE
VP2 REC Y
VP3 REC C
VP4 PB RF
VP5 REC AFM
TO VIDEO CN401
Pin2 HEAD SW
Pin1 ENV

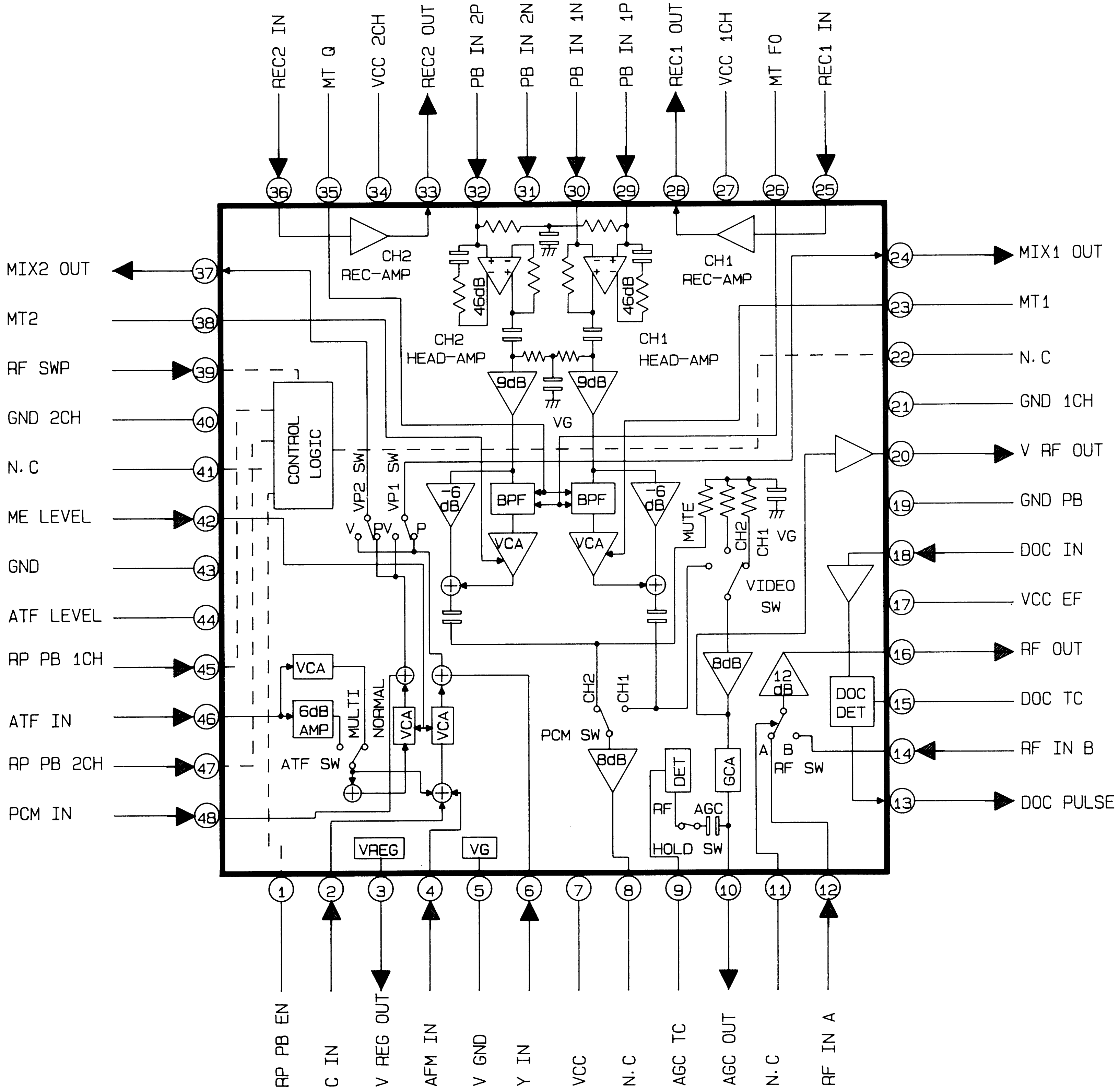
NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

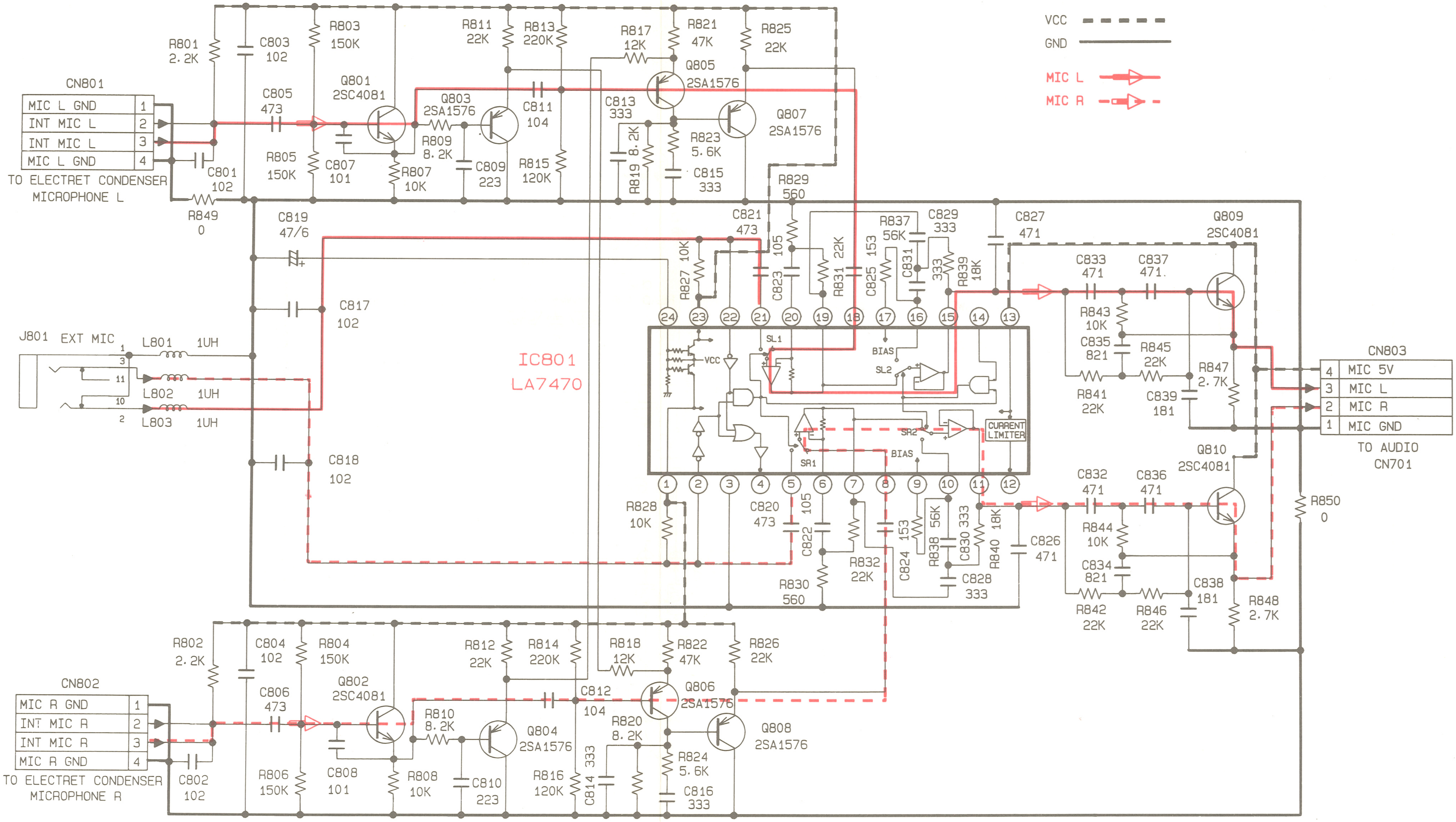
IC 101 (CXA1202)

PIN NO	PLAY BACK	RECORD
1	5.0V	5.0V
2	0.0V	3.4V
3	4.4V	4.4V
4	0.0V	3.4V
5	2.7V	2.7V
6	0.0V	3.4V
7	5.0V	5.0V
8	1.9V	2.3V
9	4.5V	5.0V
10	2.6V	4.0V
11	0.0V	3.1V
12	2.7V	0.0V
13	0.0V	2.8V
14	2.8V	2.0V
15	2.8V	1.4V
16	2.6V	5.0V
17	5.3V	5.0V
18	2.7V	0.0V
19	0.0V	2.3V
20	2.0V	0.0V
21	0.0V	0.0V
22	0.0V	3.3V
23	3.4V	2.7V
24	2.8V	2.0V
25	2.1V	0.0V
26	2.8V	5.0V
27	5.0V	4.9V
28	5.0V	2.7V
29	2.4V	4.4V
30	2.5V	4.4V
31	2.5V	2.7V
32	2.5V	4.9V
33	5.0V	5.0V
34	5.0V	5.0V
35	2.8V	0.0V
36	2.2V	2.0V
37	2.8V	2.7V
38	3.5V	3.5V
39	2.6V	2.6V
40	0.0V	0.0V
41	0.0V	0.0V
42	3.7V	3.6V
43	0.0V	0.0V
44	5.0V	5.0V
45	4.0V	0.0V
46	2.7V	2.8V
47	3.9V	0.0V
48	2.7V	3.1V

IC101 CXA1202R


REC2 IN
MT Q
VCC 2CH
REC2 OUT
PB IN 2P
PB IN 2N
PB IN 1N
PB IN 1P
REC1 OUT
VCC 1CH
MT FO
REC1 IN
MIX2 OUT
MT2
RF SWP
GND 2CH
N.C
ME LEVEL
GND
ATF LEVEL
RP PB 1CH
ATF IN
RP PB 2CH
PCM IN
MIX1 OUT
MT1
N.C
GND 1CH
V RF OUT
GND PB
DOC IN
VCC EF
RF OUT
DOC TC
RF IN B
DOC PULSE
RP PB EN
C IN
V REG OUT
AFM IN
V GND
Y IN
VCC
N.C
AGC TC
AGC OUT
N.C
RF IN A
CH2 REC-AMP
CH1 REC-AMP
46dB
CH2 HEAD-AMP
CH1 HEAD-AMP
9dB
VG
CONTROL LOGIC
VP2 SW
VP1 SW
V
PV
P
-6 dB
BPF
VCA
MUTE
CH2
CH1
VIDEO SW
8dB
12 dB
DOC DET
6dB AMP
MULTI
NORMAL
ATF SW
PCM SW
DET
GCA
RF
AGC
HOLD SW
A
B
RF SW
VREG

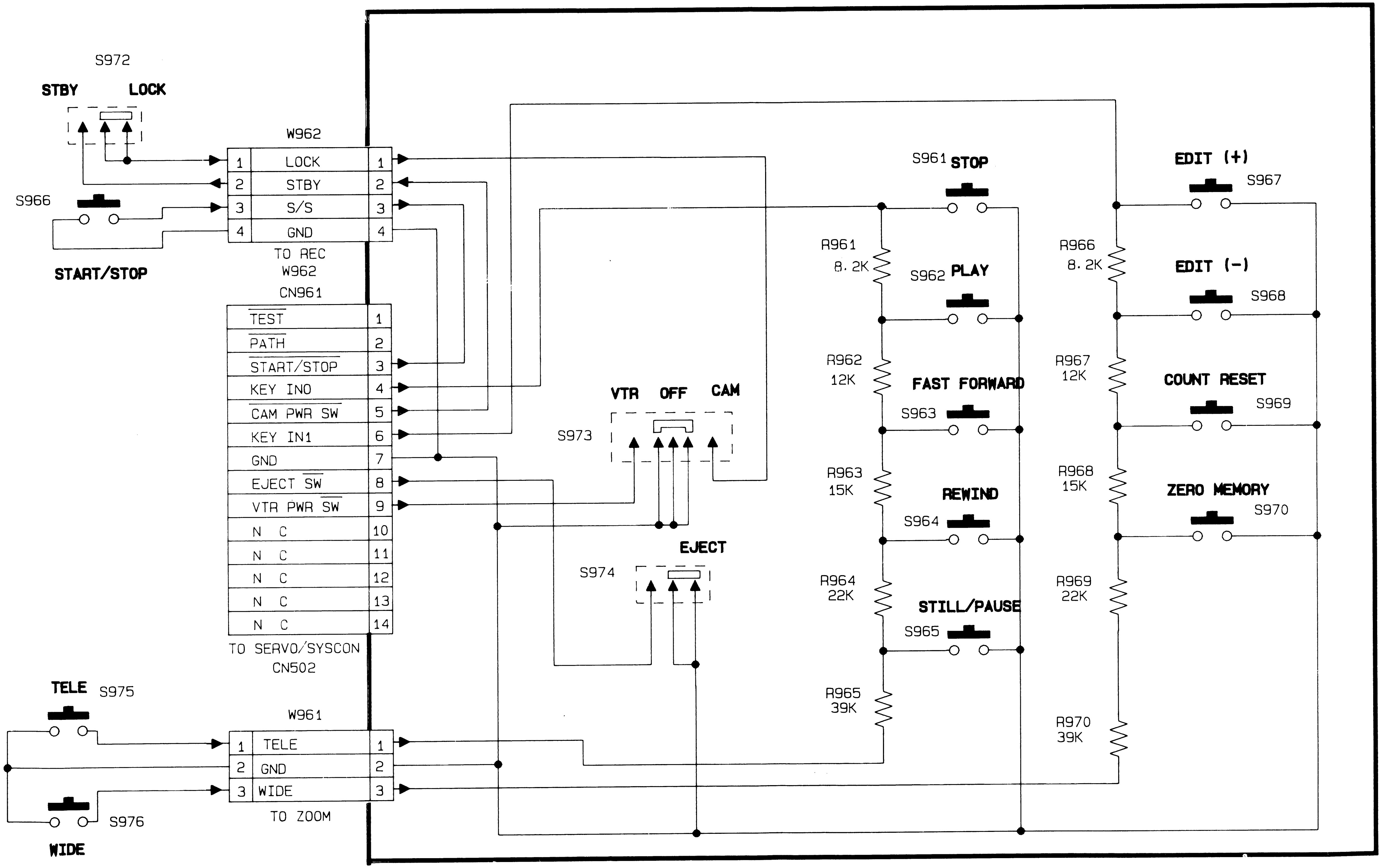
10-7. MIC


VCC
GND
MIC L
MIC R
CN801
MIC L GND 1
INT MIC L 2
INT MIC L 3
MIC L GND 4
TO ELECTRET CONDENSER MICROPHONE L
R801 2.2K
C803 102
R803 150K
R811 22K
R813 220K
R817 12K
R821 47K
R825 22K
C805 473
Q801 2SC4081
Q803 2SA1576
Q805 2SA1576
Q807 2SA1576
C811 104
C813 333
R809 8.2K
R819 8.2K
R823 5.6K
C801 102
R805 150K
C807 101
R807 10K
C809 223
R815 120K
C815 333
R829 560
R849 0
C819 47/6
C821 473
C829 333
C827 471
Q809 2SC4081
R837 56K
R827 10K
C823 105
R831 22K
C825 153
C831 333
R839 18K
C833 471
C837 471
R843 10K
C835 821
R845 22K
R847 2.7K
R841 22K
C839 181
C817 102
J801 EXT MIC
L801 1UH
L802 1UH
L803 1UH
IC801 LA7470
VCC
SL1
BIAS
SL2
SR2
BIAS
SR1
CURRENT LIMITER
C818 102
CN803
4 MIC 5V
3 MIC L
2 MIC R
1 MIC GND
TO AUDIO CN701
Q810 2SC4081
C832 471
C836 471
R850 0
R828 10K
C820 473
C822 105
R832 22K
C824 153
R838 56K
C830 333
R840 18K
C826 471
R844 10K
C834 821
C838 181
R848 2.7K
R842 22K
R846 22K
C828 333
R830 560
R802 2.2K
C804 102
R804 150K
R812 22K
R814 220K
R818 12K
R822 47K
R826 22K
CN802
MIC R GND 1
INT MIC R 2
INT MIC R 3
MIC R GND 4
TO ELECTRET CONDENSER MICROPHONE R
Q802 2SC4081
C806 473
C812 104
Q806 2SA1576
R810 8.2K
Q804 2SA1576
R820 8.2K
Q808 2SA1576
R824 5.6K
C802 102
R806 150K
C808 101
R808 10K
C810 223
R816 120K
C814 333
C816 333

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

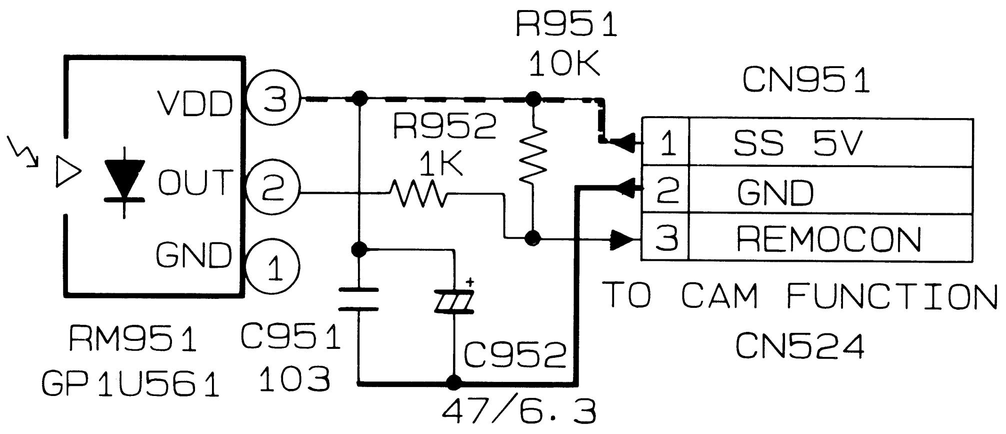
10-8. Main Function


S972
STBY
LOCK
W962
1 LOCK 1
2 STBY 2
3 S/S 3
4 GND 4
S966
START/STOP
TO REC
W962
CN961
TEST 1
PATH 2
START/STOP 3
KEY IN0 4
CAM PWR SW 5
KEY IN1 6
GND 7
EJECT SW 8
VTR PWR SW 9
N C 10
N C 11
N C 12
N C 13
N C 14
TO SERVO/SYSCON
CN502
VTR
OFF
CAM
S973
EJECT
S974
S961 STOP
R961
8.2K
S962 PLAY
R962
12K
FAST FORWARD
S963
R963
15K
REWIND
S964
R964
22K
STILL/PAUSE
S965
R965
39K
EDIT (+)
S967
R966
8.2K
EDIT (-)
S968
R967
12K
COUNT RESET
S969
R968
15K
ZERO MEMORY
S970
R969
22K
R970
39K
TELE
S975
W961
1 TELE 1
2 GND 2
3 WIDE 3
TO ZOOM
S976
WIDE

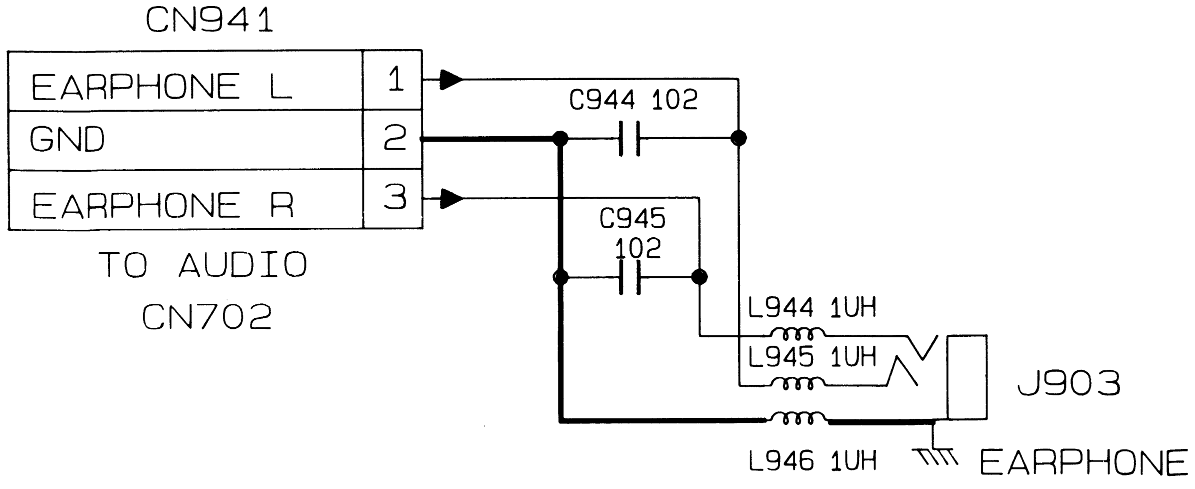
SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

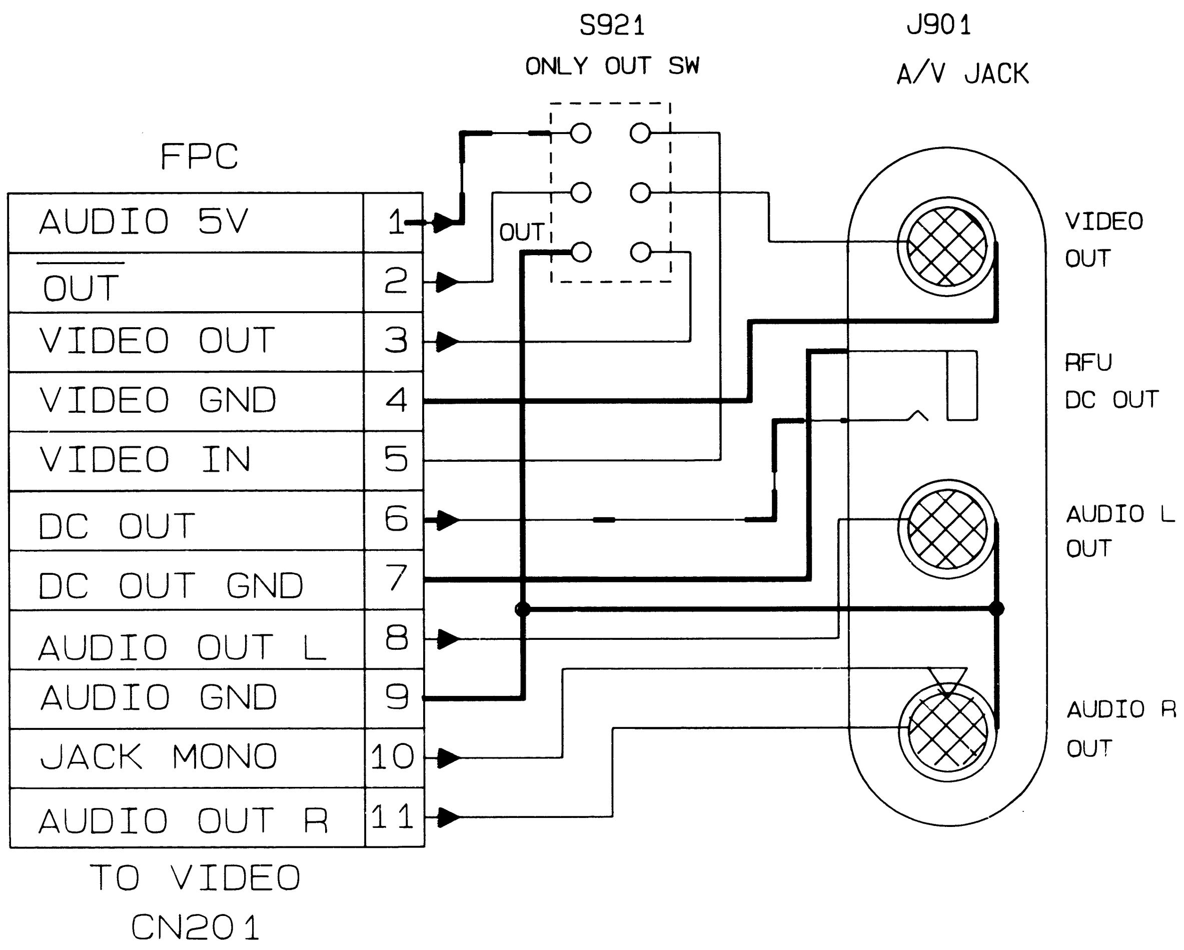
10-9. Remocon Module


R951
10K
CN951
VDD
3
R952
1K
1
SS 5V
OUT
2
2
GND
3
REMOCON
GND
1
TO CAM FUNCTION
CN524
RM951
GP1U561
C951
103
C952
47/6.3

10-10. Headphone


CN941
EARPHONE L
1
GND
2
EARPHONE R
3
TO AUDIO
CN702
C944 102
C945
102
L944 1UH
L945 1UH
L946 1UH
J903
EARPHONE

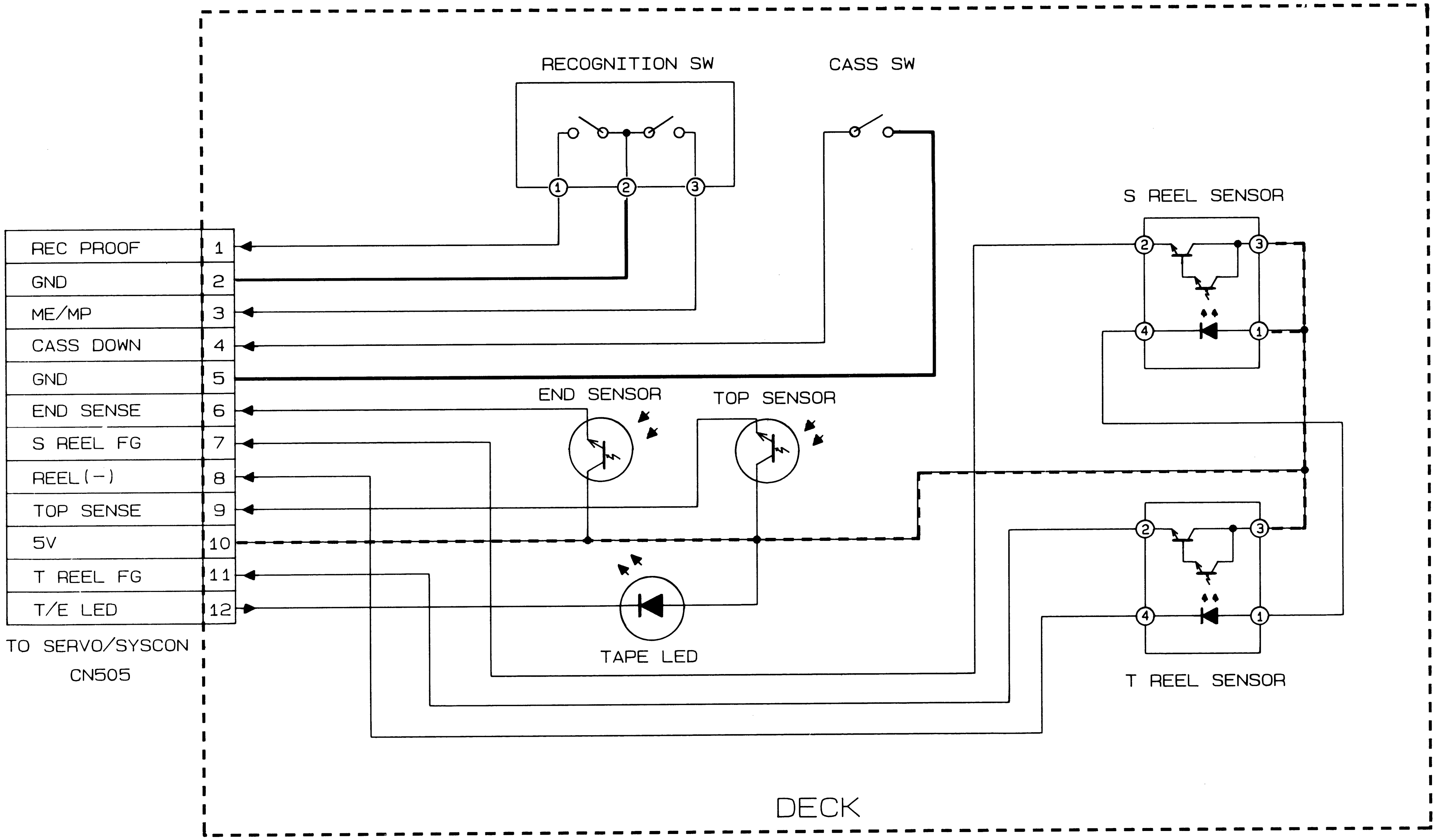
10-11. A/V JACK


S921
ONLY OUT SW
J901
A/V JACK
FPC
AUDIO 5V
1
OUT
2
VIDEO OUT
3
VIDEO GND
4
VIDEO IN
5
DC OUT
6
DC OUT GND
7
AUDIO OUT L
8
AUDIO GND
9
JACK MONO
10
AUDIO OUT R
11
OUT
VIDEO
OUT
RFU
DC OUT
AUDIO L
OUT
AUDIO R
OUT
TO VIDEO
CN201

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

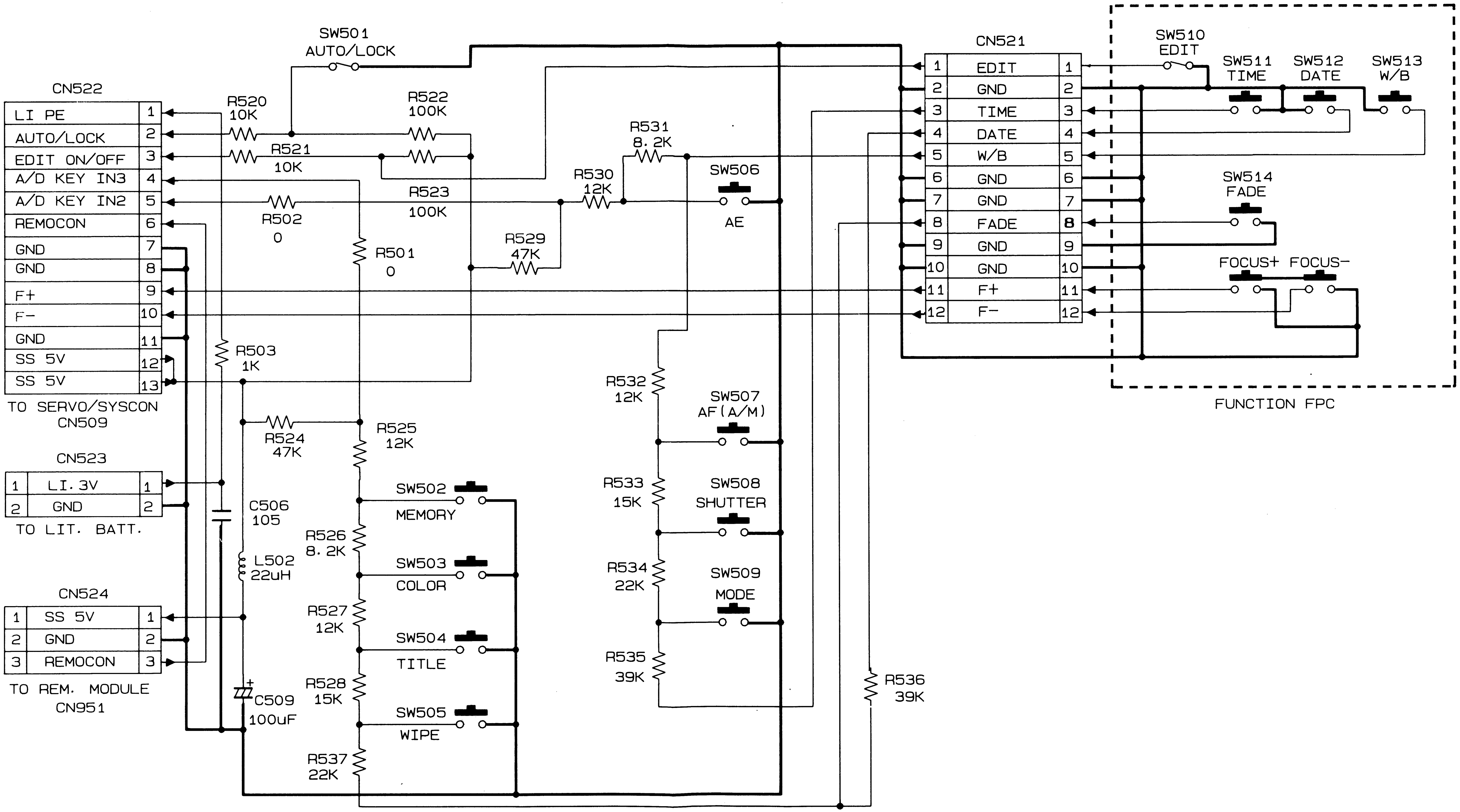
10-12. DECK F.P.C


RECOGNITION SW
CASS SW
S REEL SENSOR
T REEL SENSOR
END SENSOR
TOP SENSOR
TAPE LED
DECK
REC PROOF 1
GND 2
ME/MP 3
CASS DOWN 4
GND 5
END SENSE 6
S REEL FG 7
REEL(−) 8
TOP SENSE 9
5V 10
T REEL FG 11
T/E LED 12
TO SERVO/SYSCON
CN505

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

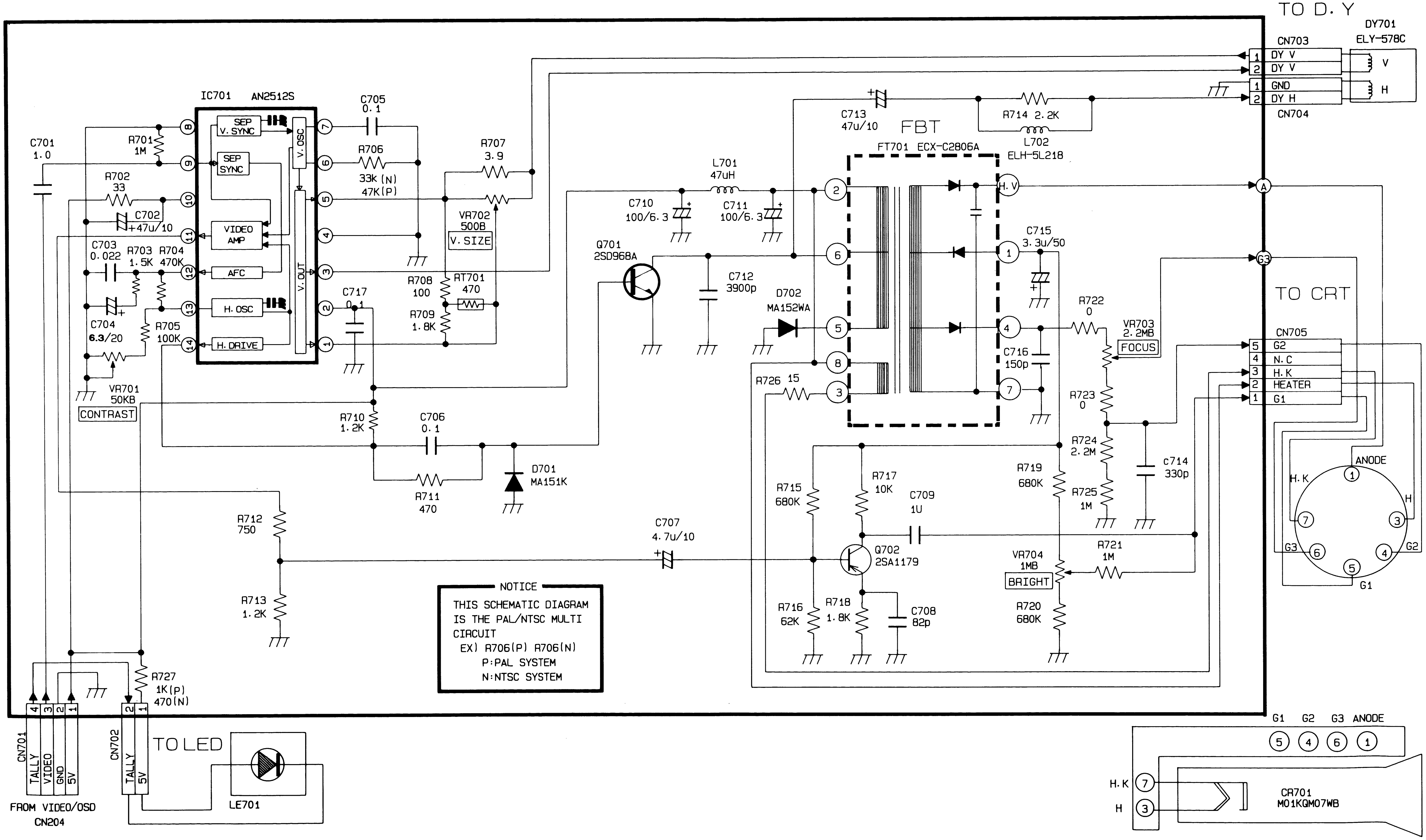
10-13. CAMERA Function


CN522
1 LI PE
2 AUTO/LOCK
3 EDIT ON/OFF
4 A/D KEY IN3
5 A/D KEY IN2
6 REMOCON
7 GND
8 GND
9 F+
10 F−
11 GND
12 SS 5V
13 SS 5V
TO SERVO/SYSCON CN509
CN523
1 LI. 3V
2 GND
TO LIT. BATT.
CN524
1 SS 5V
2 GND
3 REMOCON
TO REM. MODULE CN951
SW501 AUTO/LOCK
R520 10K
R521 10K
R522 100K
R523 100K
R502 0
R501 0
R503 1K
R529 47K
R530 12K
R531 8. 2K
SW506 AE
C506 105
L502 22uH
C509 100uF
R524 47K
R525 12K
SW502 MEMORY
R526 8. 2K
SW503 COLOR
R527 12K
SW504 TITLE
R528 15K
SW505 WIPE
R537 22K
R532 12K
SW507 AF(A/M)
R533 15K
SW508 SHUTTER
R534 22K
SW509 MODE
R535 39K
R536 39K
CN521
1 EDIT 1
2 GND 2
3 TIME 3
4 DATE 4
5 W/B 5
6 GND 6
7 GND 7
8 FADE 8
9 GND 9
10 GND 10
11 F+ 11
12 F− 12
SW510 EDIT
SW511 TIME
SW512 DATE
SW513 W/B
SW514 FADE
FOCUS+
FOCUS−
FUNCTION FPC

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

10-14. E.V.F


TO D. Y
DY701
ELY-578C
CN703
1 DY V
2 DY V
V
1 GND
2 DY H
H
CN704
IC701 AN2512S
SEP V. SYNC
SEP SYNC
V. OSC
VIDEO AMP
AFC
V. OUT
H. OSC
H. DRIVE
C701 1.0
R701 1M
R702 33
C702 +47u/10
C703 0.022
R703 1.5K
R704 470K
C704 6.3/20
R705 100K
VR701 50KB
CONTRAST
C705 0.1
R706 33k (N) 47K (P)
R707 3.9
VR702 500B
V. SIZE
R708 100
RT701 470
R709 1.8K
C717 0.1
R710 1.2K
C706 0.1
R711 470
D701 MA151K
R712 750
R713 1.2K
R727 1K (P) 470 (N)
C707 4.7u/10
Q701 2SD968A
C710 100/6.3
L701 47uH
C711 100/6.3
C712 3900p
D702 MA152WA
R726 15
C713 47u/10
FBT
FT701 ECX-C2806A
R714 2.2K
L702 ELH-5L218
H. V
C715 3.3u/50
C716 150p
R722 0
VR703 2.2MB
FOCUS
R723 0
R724 2.2M
R725 1M
C714 330p
R715 680K
R717 10K
C709 1U
Q702 2SA1179
R716 62K
R718 1.8K
C708 82p
R719 680K
VR704 1MB
BRIGHT
R721 1M
R720 680K
A
G3
TO CRT
CN705
5 G2
4 N. C
3 H. K
2 HEATER
1 G1
ANODE
H. K
H
G3
G2
G1
CN701
TALLY
VIDEO
GND
5V
FROM VIDEO/OSD CN204
CN702
TALLY
5V
TO LED
LE701
G1 G2 G3 ANODE
CR701 M01KQM07WB

NOTICE

THIS SCHEMATIC DIAGRAM IS THE PAL/NTSC MULTI CIRCUIT

EX) R706(P) R706(N)

P:PAL SYSTEM

N:NTSC SYSTEM

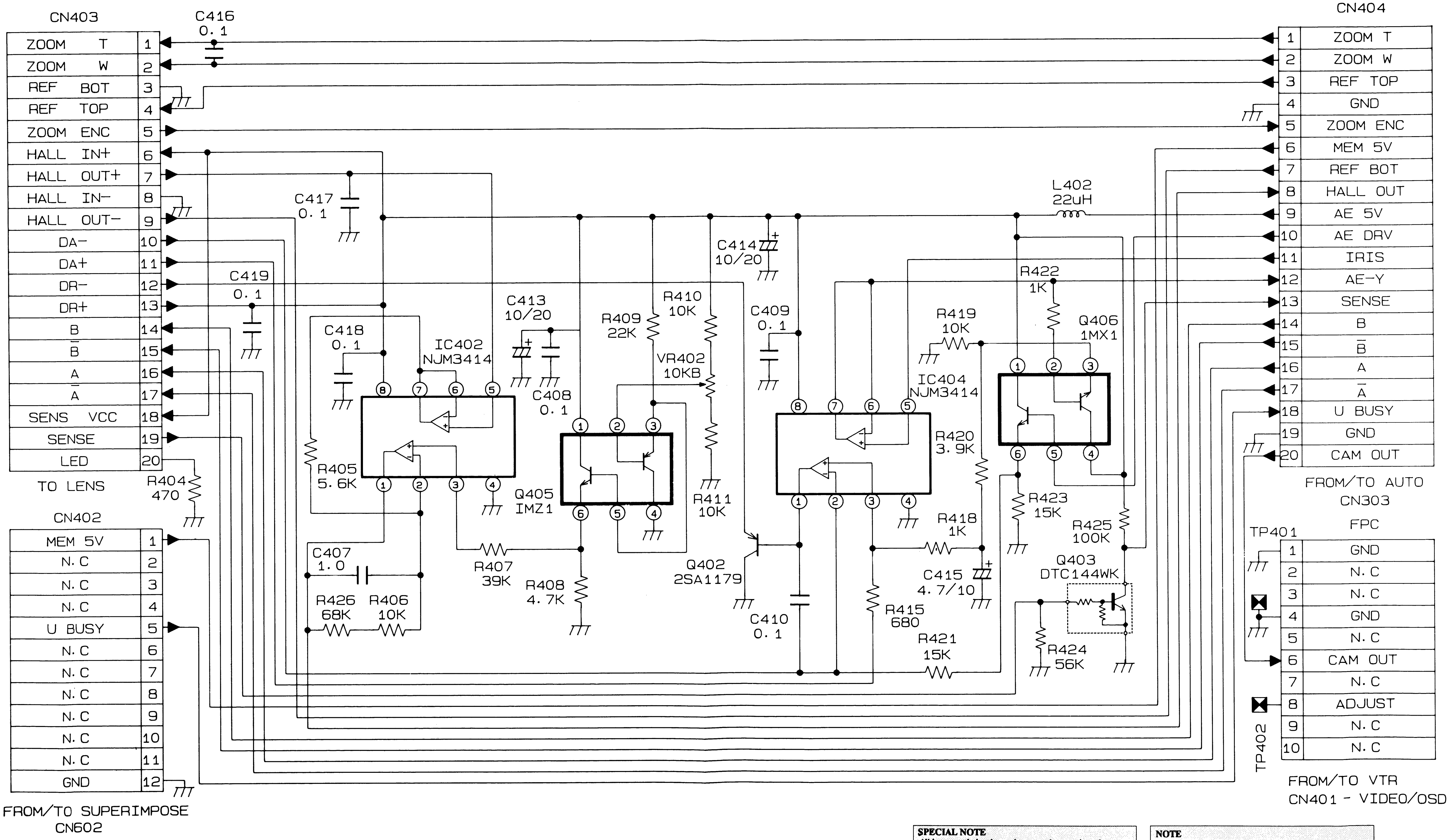
SPECIAL NOTE

All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE

Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

10-15. Lens Drive


CN403
1 ZOOM T
2 ZOOM W
3 REF BOT
4 REF TOP
5 ZOOM ENC
6 HALL IN+
7 HALL OUT+
8 HALL IN−
9 HALL OUT−
10 DA−
11 DA+
12 DR−
13 DR+
14 B
15 B̄
16 A
17 Ā
18 SENS VCC
19 SENSE
20 LED
TO LENS
C416 0.1
C417 0.1
C419 0.1
C418 0.1
R405 5.6K
R404 470
IC402 NJM3414
C413 10/20
C408 0.1
Q405 IMZ1
R409 22K
R410 10K
VR402 10KB
R411 10K
R407 39K
R408 4.7K
C407 1.0
R426 68K
R406 10K
C414 10/20
C409 0.1
Q402 2SA1179
C410 0.1
IC404 NJM3414
R415 680
R419 10K
R420 3.9K
R418 1K
C415 4.7/10
R421 15K
L402 22uH
R422 1K
Q406 1MX1
R423 15K
R425 100K
Q403 DTC144WK
R424 56K
CN402
1 MEM 5V
2 N.C
3 N.C
4 N.C
5 U BUSY
6 N.C
7 N.C
8 N.C
9 N.C
10 N.C
11 N.C
12 GND
FROM/TO SUPERIMPOSE
CN602
CN404
1 ZOOM T
2 ZOOM W
3 REF TOP
4 GND
5 ZOOM ENC
6 MEM 5V
7 REF BOT
8 HALL OUT
9 AE 5V
10 AE DRV
11 IRIS
12 AE−Y
13 SENSE
14 B
15 B̄
16 A
17 Ā
18 U BUSY
19 GND
20 CAM OUT
FROM/TO AUTO
CN303
FPC
TP401
1 GND
2 N.C
3 N.C
4 GND
5 N.C
6 CAM OUT
7 N.C
8 ADJUST
9 N.C
10 N.C
TP402
FROM/TO VTR
CN401 - VIDEO/OSD

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

LENS DRIVE

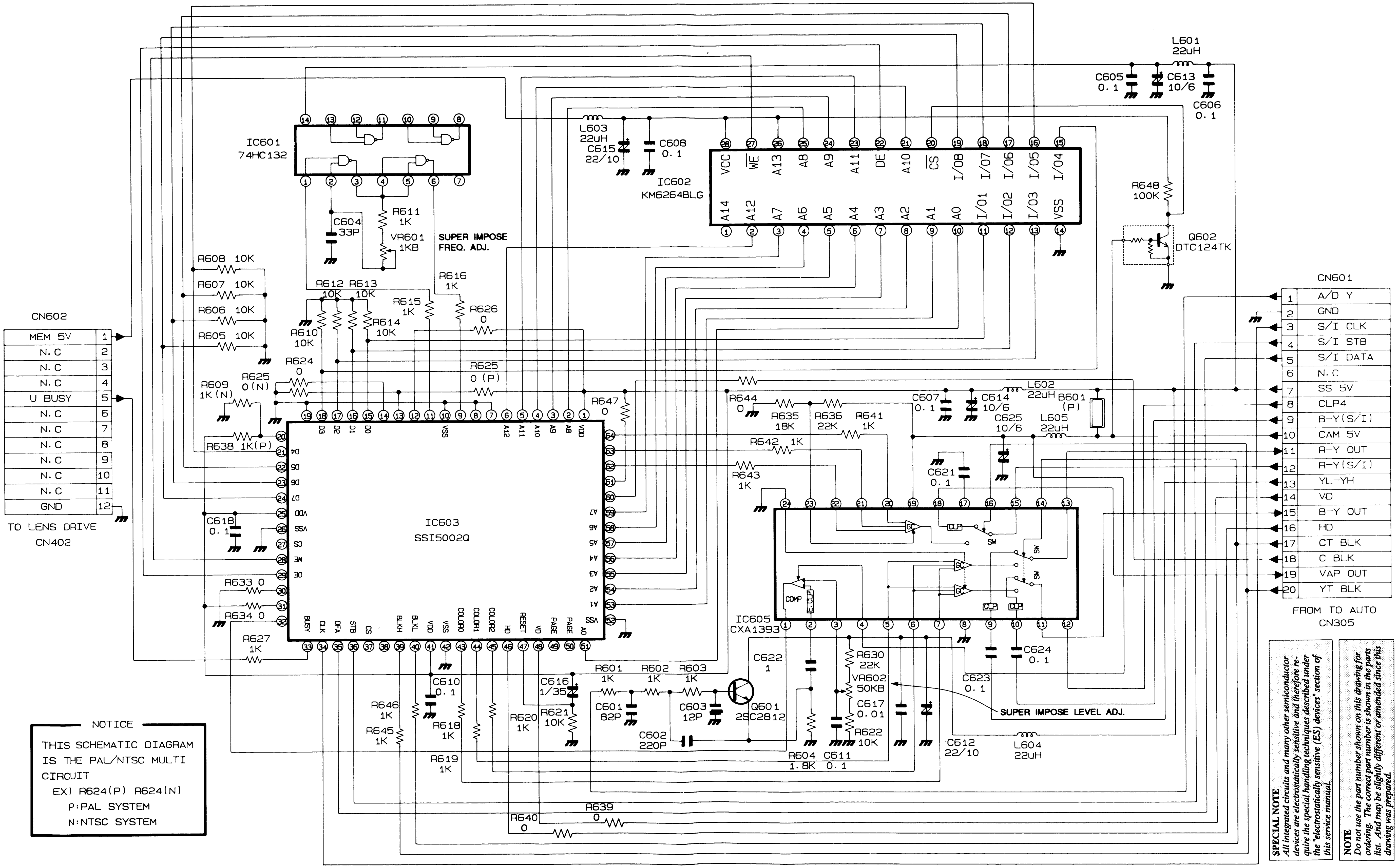
IC402(NJM3414)	
PIN NO	VOLTAGE(DC)
1	2.7V
2	2.5V
3	2.5V
4	0.0V
5	3.1V
6	3.1V
7	3.1V
8	4.9V

Q405(IMZ1)	
PIN NO	VOLTAGE(DC)
1	4.9V
2	2.5V
3	3.1V
4	0.0V
5	3.1V
6	2.5V

Q406(IMX1)	
PIN NO	VOLTAGE(DC)
1	4.9V
2	3.1V
3	2.5V
4	4.9V
5	3.1V
6	2.5V

IC404(NJM3414)	
PIN NO	VOLTAGE(DC)
1	3.9V
2	2.5V
3	2.5V
4	0.0V
5	0.0V
6	2.4V
7	2.4V
8	4.8V

10-16. Super Impose


IC601
74HC132
C604
33P
R611
1K
VR601
1KB
SUPER IMPOSE
FREQ. ADJ.
R608 10K
R607 10K
R606 10K
R605 10K
R612 R613
10K 10K
R610
10K
R615
1K
R614
10K
R616
1K
R626
0
R624
0
R625
0 (P)
R609
1K (N)
R625
0 (N)
R638 1K(P)
R647
0
C618
0. 1
R633 0
R634 0
R627
1K
IC603
SSI5002Q
D3 D2 D1 D0 VSS A12 A11 A10 A9 A8 VDD
D4 D5 D6 D7 VDD VSS CS WE OE
A7 A6 A5 A4 A3 A2 A1 VSS
BUSY CLK OFA STB CS BLKH BLKL VDD VSS COLOR0 COLOR1 COLOR2 HD RESET VD PAGE PAGE A0
C610
0. 1
R646
1K
R645
1K
R618
1K
R619
1K
R620
1K
R621
10K
C616
1/35
R601 R602 R603
1K 1K 1K
C601
82P
C603
12P
C602
220P
Q601
2SC2812
C622
1
R630
22K
VR602
50KB
C617
0. 01
R622
10K
R604 C611
1. 8K 0. 1
C623
0. 1
C624
0. 1
C612
22/10
L604
22uH
SUPER IMPOSE LEVEL ADJ.
R640
0
R639
0
L603
22uH
C615
22/10
C608
0. 1
IC602
KM6264BLG
VCC WE A13 A8 A9 A11 OE A10 CS I/O8 I/O7 I/O6 I/O5 I/O4
A14 A12 A7 A6 A5 A4 A3 A2 A1 A0 I/O1 I/O2 I/O3 VSS
L601
22uH
C605
0. 1
C613
10/6
C606
0. 1
R648
100K
Q602
DTC124TK
R644
0
R635
18K
R636
22K
R641
1K
R642 1K
R643
1K
C607
0. 1
C614
10/6
L602
22uH
B601
(P)
C625
10/6
L605
22uH
C621
0. 1
IC605
CXA1393
COMP
CLP
SW
CN602
MEM 5V 1
N. C 2
N. C 3
N. C 4
U BUSY 5
N. C 6
N. C 7
N. C 8
N. C 9
N. C 10
N. C 11
GND 12
TO LENS DRIVE
CN402
CN601
1 A/D Y
2 GND
3 S/I CLK
4 S/I STB
5 S/I DATA
6 N. C
7 SS 5V
8 CLP4
9 B-Y(S/I)
10 CAM 5V
11 R-Y OUT
12 R-Y(S/I)
13 YL-YH
14 VD
15 B-Y OUT
16 HD
17 CT BLK
18 C BLK
19 VAP OUT
20 YT BLK
FROM TO AUTO
CN305

NOTICE

THIS SCHEMATIC DIAGRAM
IS THE PAL/NTSC MULTI
CIRCUIT
EX) R624(P) R624(N)
P:PAL SYSTEM
N:NTSC SYSTEM

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

IC601(74HC132)	
PIN NO	VOLTAGE(DC)
1	4.4V
2	2.6V
3	2.6V
4	2.6V
5	2.6V
6	2.3V
7	0.0V
8	4.0V
9	0.8V
10	0.8V
11	0.8V
12	4.4V
13	4.6V
14	4.9V

IC602(KM6264BLG)	
PINNO	VOLTAGE(DC)
1	0.0V
2	0.0V
3	0.0V
4	0.0V
5	0.0V
6	0.0V
7	0.0V
8	0.0V
9	0.0V
10	0.0V
11	0.0V
12	0.0V
13	0.0V
14	0.0V
15	0.0V
16	0.0V
17	0.0V
18	0.0V
19	0.0V
20	0.0V
21	0.0V
22	5.0V
23	0.0V
24	0.0V
25	0.0V
26	4.7V
27	5.0V
28	4.7V

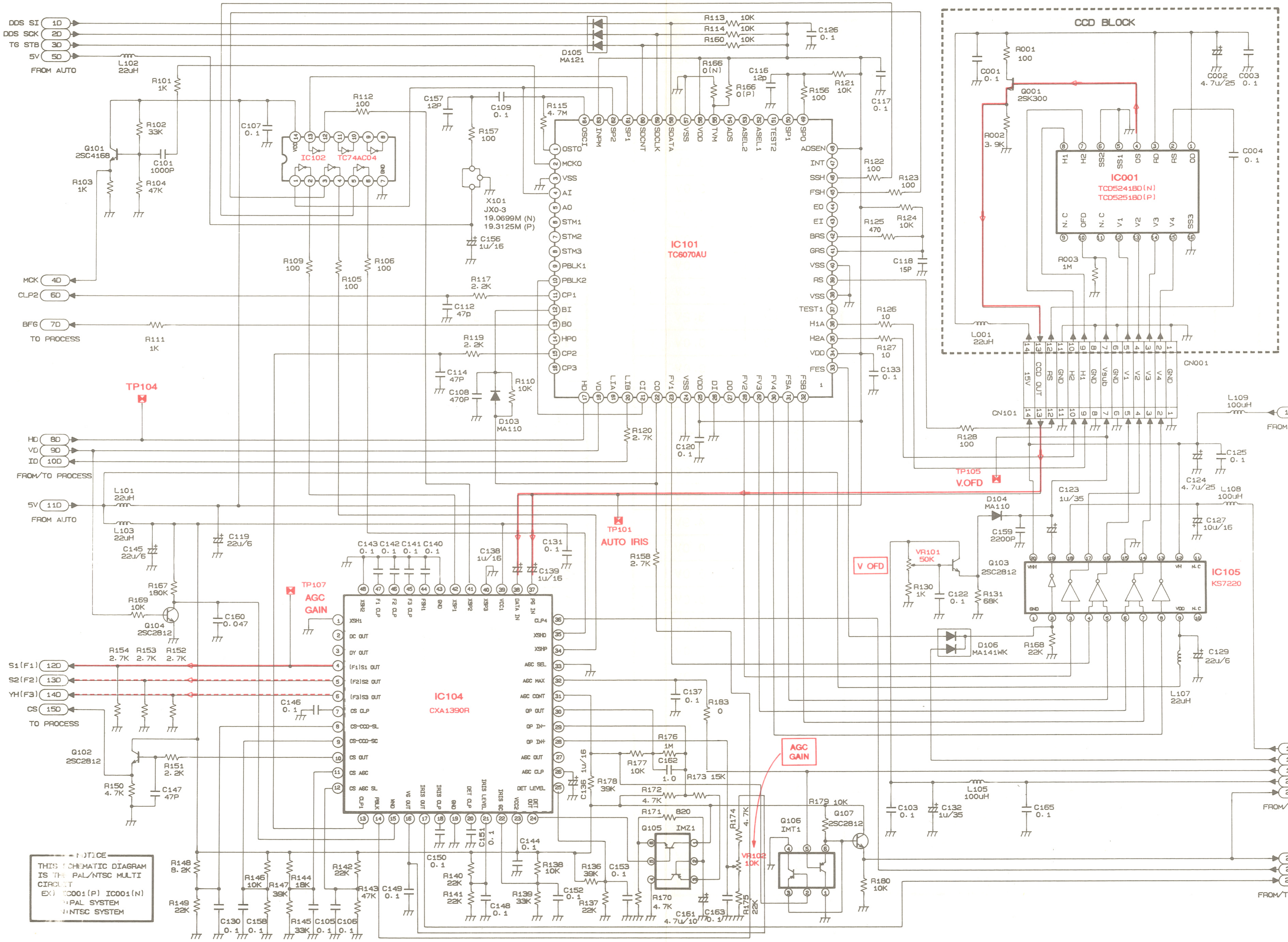
IC603(SSI5002Q)	
PIN NO	VOLTAGE(DC)
1	4.9V
2	0.0V
3	0.0V
4	0.0V
5	0.0V
6	0.0V
7	0.0V
8	0.0V
9	2.3V
10	0.0V
11	4.4V
12	0.0V
13	4.9V
14	4.9V
15	0.0V
16	0.0V
17	0.0V
18	0.0V
19	0.0V
20	0.0V
21	0.0V
22	0.0V
23	0.0V
24	0.0V
25	4.9V
26	0.0V
27	4.9V
28	4.9V
29	4.9V
30	4.9V
31	0.0V
32	0.0V

IC603(SSI5002Q)	
PIN NO	VOLTAGE(DC)
33	0.0V
34	0.0V
35	0.0V
36	0.0V
37	0.0V
38	0.0V
39	0.0V
40	0.0V
41	0.0V
42	3.2V
43	0.0V
44	0.0V
45	4.7V
46	0.0V
47	0.0V
48	0.0V
49	0.0V
50	4.9V
51	0.0V
52	0.0V
53	0.0V
54	0.0V
55	0.0V
56	0.0V
57	4.4V
58	0.0V
59	0.0V
60	0.0V
61	0.0V
62	0.0V
63	0.0V
64	0.0V

IC605(CXA1393)	
PINNO	VOLTAGE(DC)
1	1.8V
2	2.3V
3	1.7V
4	4.8V
5	0.0V
6	0.0V
7	0.0V
8	0.0V
9	2.8V
10	2.9V
11	2.8V
12	0.2V
13	2.7V
14	4.8V
15	2.7V
16	0.0V
17	2.2V
18	2.8V
19	4.8V
20	0.0V
21	0.0V
22	0.0V
23	2.2V
24	0.0V

10-17. Drive/CCD

RED —— Y SIGNAL
- - - - - R-Y SIGNAL


DDS SI 1D
DDS SCK 2D
TG STB 3D
5V 5D
FROM AUTO
L102 22uH
MCK 4D
CLP2 6D
BFG 7D
TO PROCESS
TP104
HD 8D
VD 9D
ID 10D
FROM/TO PROCESS
5V 11D
FROM AUTO
S1(F1) 12D
S2(F2) 13D
YH(F3) 14D
CS 15D
TO PROCESS
Q101 2SC4168
Q102 2SC2812
Q104 2SC2812
IC102 TC74AC04
X101 JX0-3 19.0699M (N) 19.3125M (P)
D105 MA121
IC101 TC6070AU
D103 MA110
CCD BLOCK
Q001 2SK300
IC001 TCD5241BD(N) TCD5251BD(P)
L001 22uH
CN001
CN101
L109 100uH
16D 15V
FROM AUTO
TP105 V.OFD
D104 MA110
Q103 2SC2812
VR101 50K
V OFD
IC105 KS7220
D106 MA141WK
TP101 AUTO IRIS
TP107 AGC GAIN
IC104 CXA1390R
AGC GAIN
Q105 IMZ1
Q106 IMT1
Q107 2SC2812
VR102 10K
L105 100uH
L107 22uH
17D -7V
18D SHUTTER
19D AGC MAX
22D 20V
20D AGC CONT
FROM/TO AUTO
21D CS AGC
23D CLP4
24D IRIS
FROM/TO PROCESS

NOTICE
THIS SCHEMATIC DIAGRAM
IS THE PAL/NTSC MULTI
CIRCUIT
EX) IC001(P) IC001(N)
P:PAL SYSTEM
N:NTSC SYSTEM

NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

SPECIAL NOTE
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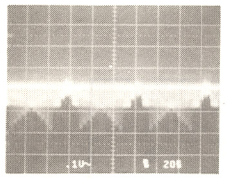
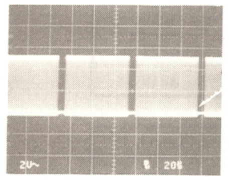
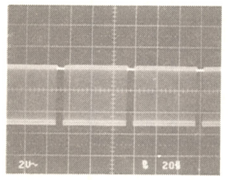
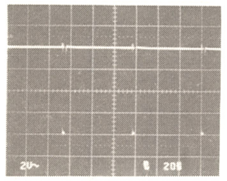
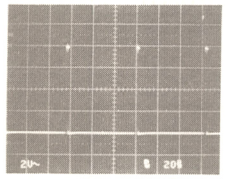
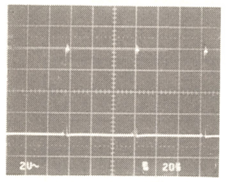

IC001-4
CCD OUT

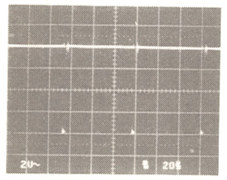

IC001-7
H2


IC001-8
H1


IC001-12
V1


IC001-13
V2


IC001-14
V3


IC001-15
V4

IC101(TC6070AU)	
PIN NO	VOLTAGE(DC)
1	2.4V
2	2.3V
3	0.0V
4	1.1V
5	1.1V
6	0.0V
7	0.0V
8	0.0V
9	1.0V
10	0.1V
11	0.0V
12	4.0V
13	4.3V
14	0.0V
15	0.0V
16	0.0V
17	0.4V
18	0.2V
19	2.5V
20	2.4V
21	1.0V
22	4.2V
23	0.1V
24	0.0V
25	4.9V
26	0.0V
27	4.9V
28	4.7V
29	4.7V
30	0.1V
31	4.9V
32	4.9V
33	4.8V
34	4.9V
35	2.2V
36	2.7V
37	0.0V
38	0.0V
39	1.1V
40	0.0V
41	1.1V
42	1.1V
43	0.0V
44	0.0V
45	1.1V
46	1.2V
47	0.0V
48	4.9V

IC101(TC6070AU)	
PIN NO	VOLTAGE(DC)
49	2.3V
50	1.4V
51	0.0V
52	0.0V
53	0.0V
54	4.9V
55	0.0V
56	4.9V
57	0.0V
58	4.5V
59	4.5V
60	4.5V
61	1.1V
62	1.1V
63	4.9V
64	1.8V

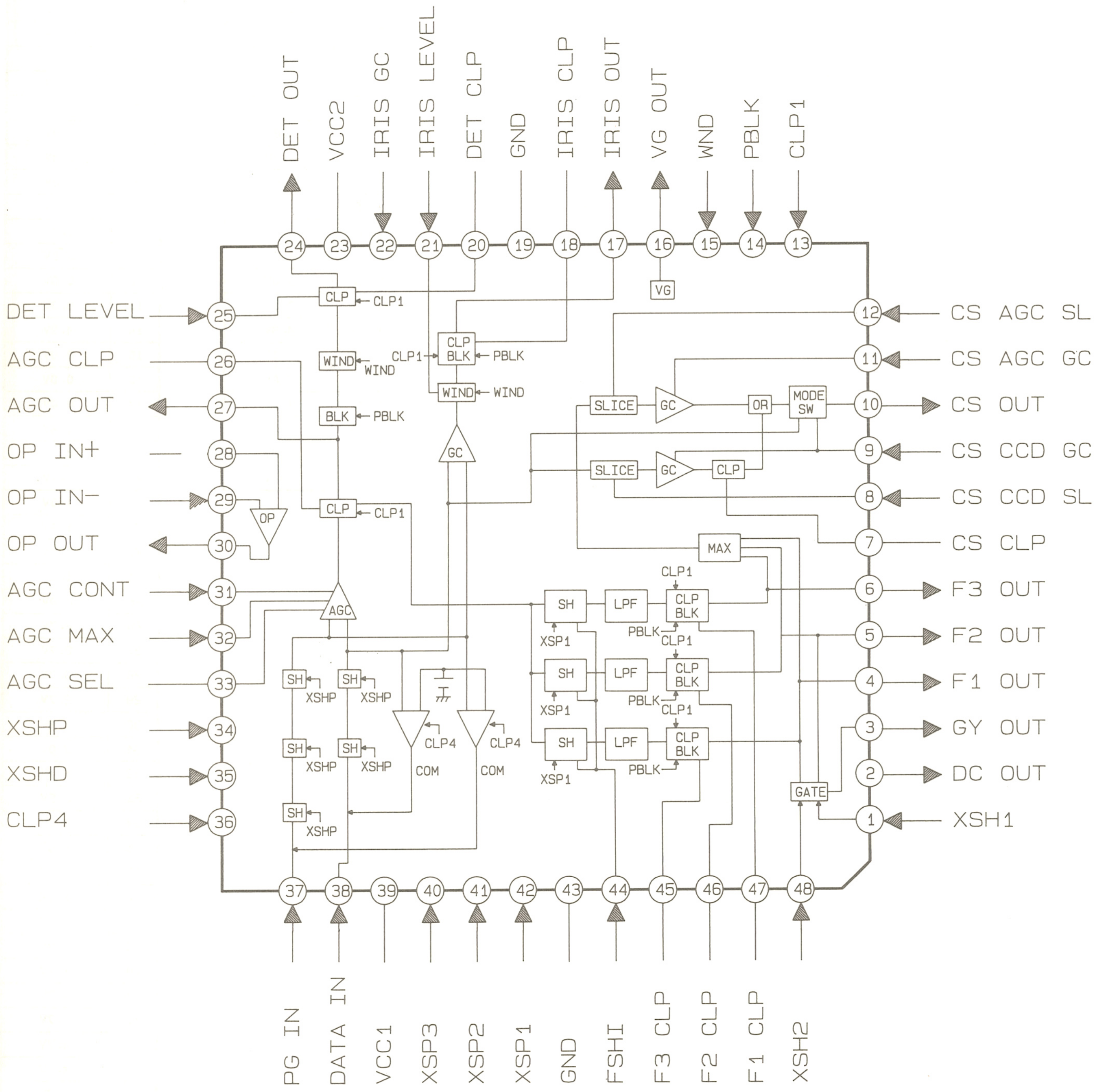
IC102(TC74AC04)	
PIN NO	VOLTAGE(DC)
1	1.1V
2	3.8V
3	1.1V
4	3.7V
5	1.1V
6	3.7V
7	0.0V
8	4.9V
9	0.0V
10	0.0V
11	2.2V
12	3.7V
13	1.1V
14	4.9V

IC104(CXA1390R)	
PIN NO	VOLTAGE(DC)
1	0.0V
2	1.9V
3	2.0V
4	2.0V
5	2.0V
6	1.9V
7	3.0V
8	3.6V
9	3.9V
10	2.0V
11	3.1V
12	3.3V
13	0.0V
14	4.1V
15	4.9V
16	2.9V
17	1.9V
18	2.3V
19	0.0V
20	2.2V
21	0.0V
22	2.5V
23	4.9V
24	1.9V
25	1.8V
26	2.5V
27	2.0V
28	2.3V
29	2.4V
30	2.4V
31	2.4V
32	4.0V
33	0.0V
34	3.7V
35	3.7V
36	0.1V
37	3.0V
38	3.0V
39	4.9V
40	0.0V
41	3.8V
42	3.8V
43	0.0V
44	1.5V
45	2.2V
46	2.2V
47	2.2V
48	0.0V

IC105(KS7220)	
PINNO	VOLTAGE(DC)
1	0.0V
2	4.4V
3	4.6V
4	0.0V
5	4.8V
6	4.6V
7	4.9V
8	0.2V
9	4.9V
10	0.0V
11	0.0V
12	15.0V
13	0.0V
14	−6.3V
15	0.0V
16	−0.2V
17	−6.4V
18	−6.7V
19	−6.7V
20	15.0V

IC001(TCD5251D)	
PIN NO	VOLTAGE(DC)
1	15.0V
2	11.5V
3	0.0V
4	6.2V
5	0.0V
6	0.0V
7	2.1V
8	2.6V
9	0.0V
10	11.0V
11	0.0V
12	0.2V
13	−6.4V
14	−6.3V
15	−0.3V
16	0.0V

IC104 CXA1390R


DET OUT
VCC2
IRIS GC
IRIS LEVEL
DET CLP
GND
IRIS CLP
IRIS OUT
VG OUT
WND
PBLK
CLP1
24
23
22
21
20
19
18
17
16
15
14
13
VG
DET LEVEL
AGC CLP
AGC OUT
OP IN+
OP IN−
OP OUT
AGC CONT
AGC MAX
AGC SEL
XSHP
XSHD
CLP4
25
26
27
28
29
30
31
32
33
34
35
36
CLP
CLP1
WIND
WIND
BLK
PBLK
CLP BLK
PBLK
WIND
WIND
GC
SLICE
GC
OR
MODE SW
SLICE
GC
CLP
OP
MAX
AGC
SH
LPF
CLP BLK
XSP1
PBLK
SH
XSHP
CLP4
COM
GATE
12
11
10
9
8
7
6
5
4
3
2
1
CS AGC SL
CS AGC GC
CS OUT
CS CCD GC
CS CCD SL
CS CLP
F3 OUT
F2 OUT
F1 OUT
GY OUT
DC OUT
XSH1
37
38
39
40
41
42
43
44
45
46
47
48
PG IN
DATA IN
VCC1
XSP3
XSP2
XSP1
GND
FSHI
F3 CLP
F2 CLP
F1 CLP
XSH2

10-18. Auto Focus

The schematic diagram of "Auto Focus" is on page 10-31.

IC301(M6219)	
PINNO	VOLTAGE(DC)
1	0.5V
2	0.0V
3	0.0V
4	0.0V
5	0.0V
6	4.8V
7	0.0V
8	0.0V
9	4.8V
10	2.9V
11	2.9V
12	3.0V
13	0.0V
14	4.9V
15	1.1V
16	4.8V
17	1.3V
18	3.8V
19	1.0V
20	0.7V

IC302(SF6401)	
PIN NO	VOLTAGE(DC)
1	2.4V
2	0.0V
3	2.4V
4	0.2V
5	0.5V
6	4.9V
7	0.3V
8	0.8V
9	0.0V
10	1.7V
11	0.0V
12	0.0V
13	0.0V
14	4.9V
15	0.0V
16	0.0V
17	0.0V
18	1.4V
19	0.4V
20	0.7V
21	1.0V
22	1.1V
23	1.1V
24	1.1V
25	0.0V
26	2.7V
27	2.7V
28	2.7V
29	2.7V
30	4.9V
31	3.0V
32	3.7V
33	3.8V
34	3.0V
35	4.9V
36	1.6V
37	1.1V
38	1.0V
39	4.9V
40	4.7V
41	4.7V
42	4.7V
43	4.7V
44	4.7V
45	4.7V
46	4.7V
47	4.7V
48	0.0V

IC303(UPD78214)	
PIN NO	VOLTAGE(DC)
1	0.0V
2	0.0V
3	0.0V
4	4.8V
5	4.8V
6	4.8V
7	2.2V
8	2.4V
9	0.0V
10	4.7V
11	4.7V
12	4.7V
13	4.7V
14	4.7V
15	4.7V
16	4.7V
17	4.7V
18	3.1V
19	0.0V
20	0.0V
21	0.0V
22	0.0V
23	0.0V
24	0.0V
25	0.0V
26	0.0V
27	0.0V
28	0.0V
29	0.0V
30	4.7V
31	4.7V
32	0.3V
33	4.7V
34	4.8V
35	1.1V
36	0.2V
37	1.6V
38	4.7V
39	0.0V
40	4.8V
41	4.8V
42	0.0V
43	3.6V
44	2.3V
45	2.3V
46	2.3V
47	2.3V
48	0.4V

IC303(UPD78214)	
PIN NO	VOLTAGE(DC)
49	3.1V
50	0.0V
51	0.0V
52	0.0V
53	3.2V
54	4.8V
55	4.8V
56	4.8V
57	4.8V
58	4.8V
59	4.8V
60	4.8V
61	4.8V
62	3.7V
63	4.8V
64	2.3V

IC304(74HC4066)	
PIN NO	VOLTAGE(DC)
1	3.8V
2	3.9V
3	3.9V
4	3.9V
5	0.2V
6	4.8V
7	0.0V
8	3.8V
9	3.8V
10	3.8V
11	3.8V
12	0.2V
13	4.8V
14	4.8V

IC305(TB6504)	
PINNO	VOLTAGE(DC)
1	4.8V
2	3.0V
3	3.0V
4	3.0V
5	4.7V
6	3.0V
7	4.8V
8	3.0V
9	0.0V
10	0.0V
11	0.0V
12	2.1V
13	2.1V
14	0.0V
15	0.0V
16	0.3V
17	3.0V
18	0.0V
19	4.8V
20	4.8V
21	0.0V
22	1.9V
23	0.0V
24	4.9V

IC306(LB1830)	
PIN NO	VOLTAGE(DC)
1	6.8V
2	0.0V
3	0.0V
4	0.0V
5	6.8V
6	1.2V
7	2.0V
8	0.0V
9	4.8V
10	4.8V

IC307(NJM3414)	
PIN NO	VOLTAGE(DC)
1	3.3V
2	3.3V
3	3.3V
4	0.0V
5	2.9V
6	2.9V
7	2.9V
8	4.8V

IC308(X24C00)	
PIN NO	VOLTAGE(DC)
1	0.0V
2	0.0V
3	0.0V
4	0.0V
5	3.6V
6	3.6V
7	0.0V
8	4.8V

Q301(IMT1)	
PIN NO	VOLTAGE(DC)
1	0.0V
2	4.2V
3	2.1V
4	0.0V
5	1.5V
6	2.1V

Q302(IMX1)	
PIN NO	VOLTAGE(DC)
1	4.8V
2	1.0V
3	0.3V
4	2.4V
5	2.4V
6	1.8V

Q303(IMX1)	
PIN NO	VOLTAGE(DC)
1	4.8V
2	2.8V
3	2.3V
4	4.8V
5	2.8V
6	2.3V

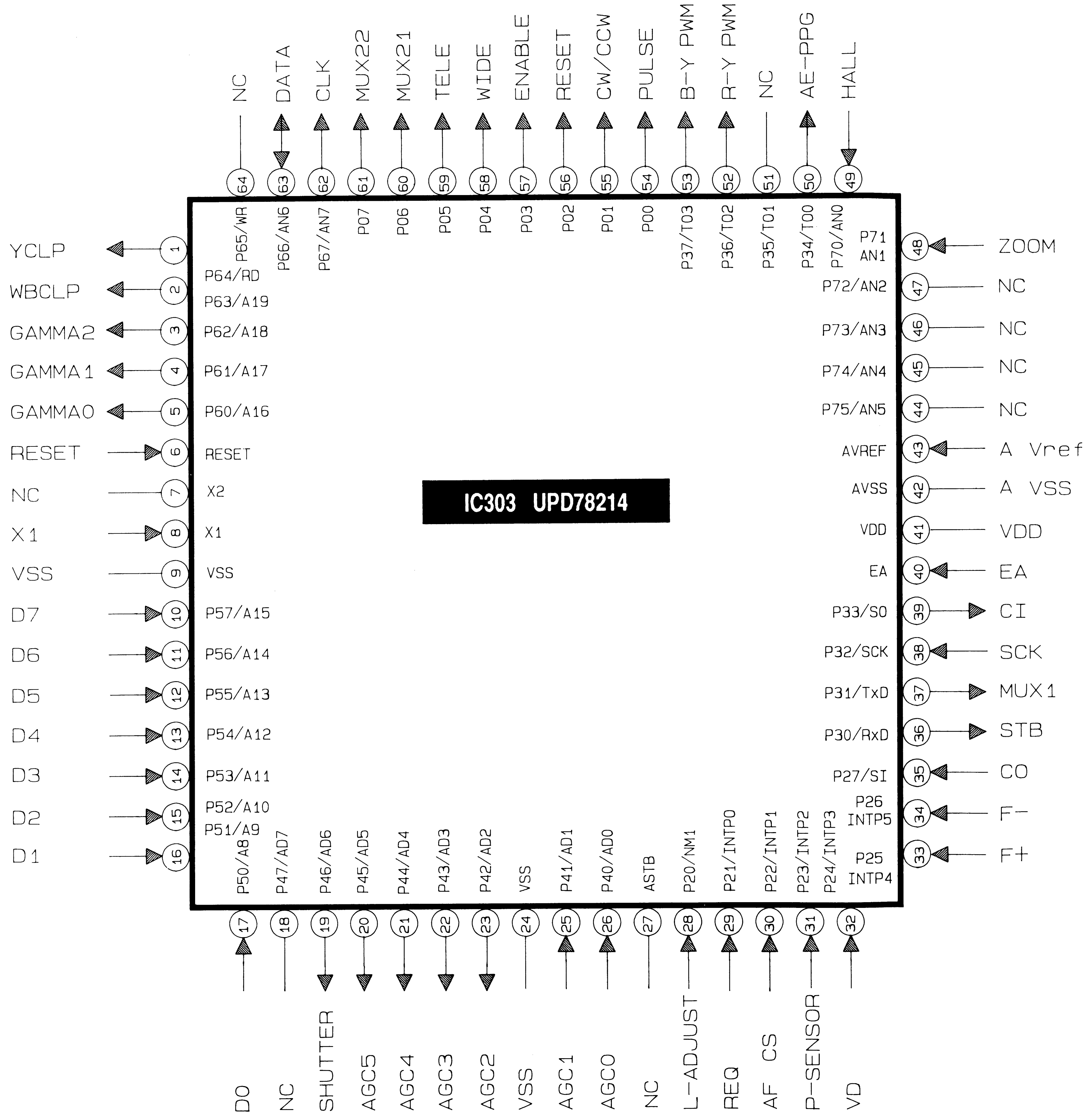
Q304(IMX1)	
PIN NO	VOLTAGE(DC)
1	4.8V
2	1.0V
3	0.5V
4	2.7V
5	2.7V
6	2.1V

Q305(IMX1)	
PIN NO	VOLTAGE(DC)
1	2.7V
2	2.7V
3	2.1V
4	4.8V
5	1.0V
6	0.4V

Q306(IMX1)	
PIN NO	VOLTAGE(DC)
1	4.9V
2	3.4V
3	2.8V
4	4.9V
5	3.4V
6	2.8V

Q317(IMZ1)	
PIN NO	VOLTAGE(DC)
1	4.8V
2	2.4V
3	2.9V
4	0.0V
5	2.8V
6	2.4V

TR NO	E	B	C
Q307	1.3V	1.8V	4.8V
Q308	0.0V	0.6V	0.0V
Q309	0.0V	2.0V	4.8V
Q310	0.5V	0.0V	0.0V
Q311	0.5V	0.0V	0.0V
Q312	0.5V	0.0V	0.0V
Q313	2.8V	2.2V	0.0V
Q314	2.2V	2.7V	4.8V
Q315	3.0V	0.2V	0.0V
Q316	0.0V	0.0V	4.8V
Q318	0.0V	0.0V	0.8V
Q319	3.6V	3.0V	6.8V
Q320	3.4V	2.8V	0.0V


IC303 UPD78214
YCLP 1 P64/RD
WBCLP 2 P63/A19
GAMMA2 3 P62/A18
GAMMA1 4 P61/A17
GAMMA0 5 P60/A16
RESET 6 RESET
NC 7 X2
X1 8 X1
VSS 9 VSS
D7 10 P57/A15
D6 11 P56/A14
D5 12 P55/A13
D4 13 P54/A12
D3 14 P53/A11
D2 15 P52/A10
D1 16 P51/A9
D0 17 P50/A8
NC 18 P47/AD7
SHUTTER 19 P46/AD6
AGC5 20 P45/AD5
AGC4 21 P44/AD4
AGC3 22 P43/AD3
AGC2 23 P42/AD2
VSS 24 VSS
AGC1 25 P41/AD1
AGC0 26 P40/AD0
NC 27 ASTB
L-ADJUST 28 P20/NM1
REQ 29 P21/INTP0
AF CS 30 P22/INTP1
P-SENSOR 31 P23/INTP2
VD 32 P24/INTP3
F+ 33 P25 INTP4
F- 34 P26 INTP5
CO 35 P27/SI
STB 36 P30/RxD
MUX1 37 P31/TxD
SCK 38 P32/SCK
CI 39 P33/SO
EA 40 EA
VDD 41 VDD
A VSS 42 AVSS
A Vref 43 AVREF
NC 44 P75/AN5
NC 45 P74/AN4
NC 46 P73/AN3
NC 47 P72/AN2
ZOOM 48 P71 AN1
HALL 49 P70/AN0
AE-PPG 50 P34/TO0
NC 51 P35/TO1
R-Y PWM 52 P36/TO2
B-Y PWM 53 P37/TO3
PULSE 54 P00
CW/CCW 55 P01
RESET 56 P02
ENABLE 57 P03
WIDE 58 P04
TELE 59 P05
MUX21 60 P06
MUX22 61 P07
CLK 62 P67/AN7
DATA 63 P66/AN6
NC 64 P65/WR

10-19. Process

The schematic diagram of "Process" is on page 10-32.

IC201(MN3861)

PINNO	VOLTAGE(DC)
1	-2.7V
2	2.7V
3	4.8V
4	0.2V
5	2.4V
6	4.9V
7	2.5V
8	2.3V
9	2.6V
10	0.0V
11	2.4V
12	0.5V
13	2.8V
14	2.7V
15	0.0V
16	2.7V

IC202(MSM6819)

PIN NO	VOLTAGE(DC)
1	8.7V
2	0.0V
3	4.9V
4	3.1V
5	3.1V
6	2.0V
7	0.0V
8	4.6V

IC203(CXA1391R)

PIN NO	VOLTAGE(DC)
49	2.0V
50	2.0V
51	3.2V
52	1.7V
53	2.9V
54	0.0V
55	3.7V
56	3.7V
57	3.3V
58	0.0V
59	2.1V
60	2.1V
61	2.1V
62	4.9V
63	3.0V
64	1.6V

IC203(CXA1391R)

PIN NO	VOLTAGE(DC)
1	3.6V
2	3.2V
3	2.5V
4	2.8V
5	2.4V
6	2.4V
7	2.8V
8	3.2V
9	0.2V
10	0.0V
11	2.9V
12	3.1V
13	3.5V
14	2.2V
15	3.5V
16	3.1V
17	3.4V
18	3.9V
19	2.6V
20	2.6V
21	3.1V
22	3.3V
23	1.9V
24	2.3V
25	0.0V
26	0.0V
27	0.0V
28	1.8V
29	1.8V
30	1.7V
31	1.7V
32	3.0V
33	1.6V
34	3.3V
35	3.3V
36	3.3V
37	4.2V
38	4.1V
39	4.1V
40	3.3V
41	2.4V
42	0.5V
43	2.9V
44	3.0V
45	0.0V
46	2.0V
47	3.0V
48	3.3V

IC204(MN67621F)

PIN NO	VOLTAGE(DC)
1	2.3V
2	0.0V
3	0.0V
4	0.0V
5	0.0V
6	0.9V
7	0.0V
8	0.0V
9	3.5V
10	0.0V
11	2.3V
12	2.4V
13	0.0V
14	4.9V
15	2.4V
16	2.4V
17	0.0V
18	0.0V
19	0.0V
20	2.4V
21	0.0V
22	4.9V
23	0.0V
24	0.0V
25	4.9V
26	0.2V
27	1.2V
28	4.5V
29	4.9V
30	0.0V
31	0.0V
32	0.0V
33	0.0V
34	0.0V
35	0.0V
36	0.0V
37	0.0V
38	2.5V
39	4.9V
40	2.3V
41	2.3V
42	0.0V
43	0.0V
44	0.0V

IC205(CXA1392R)

PIN NO	VOLTAGE(DC)
1	3.0V
2	3.4V
3	4.9V
4	2.6V
5	0.0V
6	2.3V
7	2.3V
8	4.8V
9	4.3V
10	4.6V
11	3.7V
12	4.9V
13	0.0V
14	1.7V
15	2.3V
16	2.8V
17	4.9V
18	2.4V
19	0.0V
20	1.9V
21	1.7V
22	2.2V
23	3.3V
24	3.5V
25	4.5V
26	4.0V
27	3.3V
28	2.9V
29	0.0V
30	4.5V
31	2.9V
32	3.1V
33	2.3V
34	3.1V
35	2.2V
36	3.4V
37	0.0V
38	2.5V
39	3.2V
40	4.9V
41	3.5V
42	2.0V
43	0.0V
44	0.4V
45	0.0V
46	2.9V
47	2.8V
48	3.1V

Q202(IMX1)

PIN NO	VOLTAGE(DC)
1	4.8V
2	3.1V
3	2.5V
4	2.9V
5	1.7V
6	1.2V

Q208(IMX1)

PIN NO	VOLTAGE(DC)
1	3.9V
2	2.7V
3	2.0V
4	3.9V
5	2.7V
6	2.0V

Q216(IMZ1)

PIN NO	VOLTAGE(DC)
1	4.2V
2	4.2V
3	4.8V
4	3.9V
5	1.7V
6	1.2V

Q217(IMZ1)

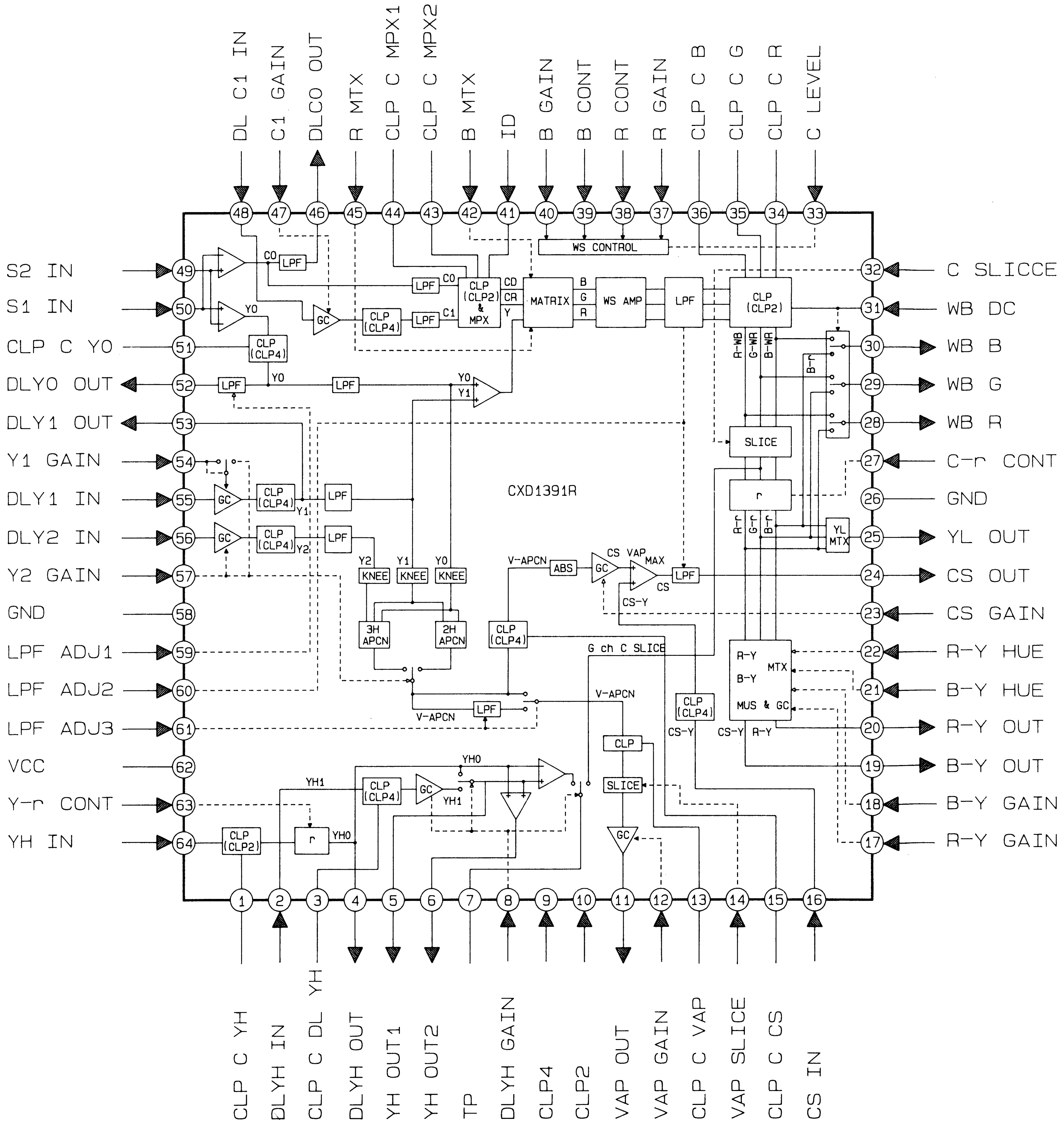
PIN NO	VOLTAGE(DC)
1	4.2V
2	4.2V
3	4.8V
4	2.9V
5	1.7V
6	1.2V

Q218(IMX1)

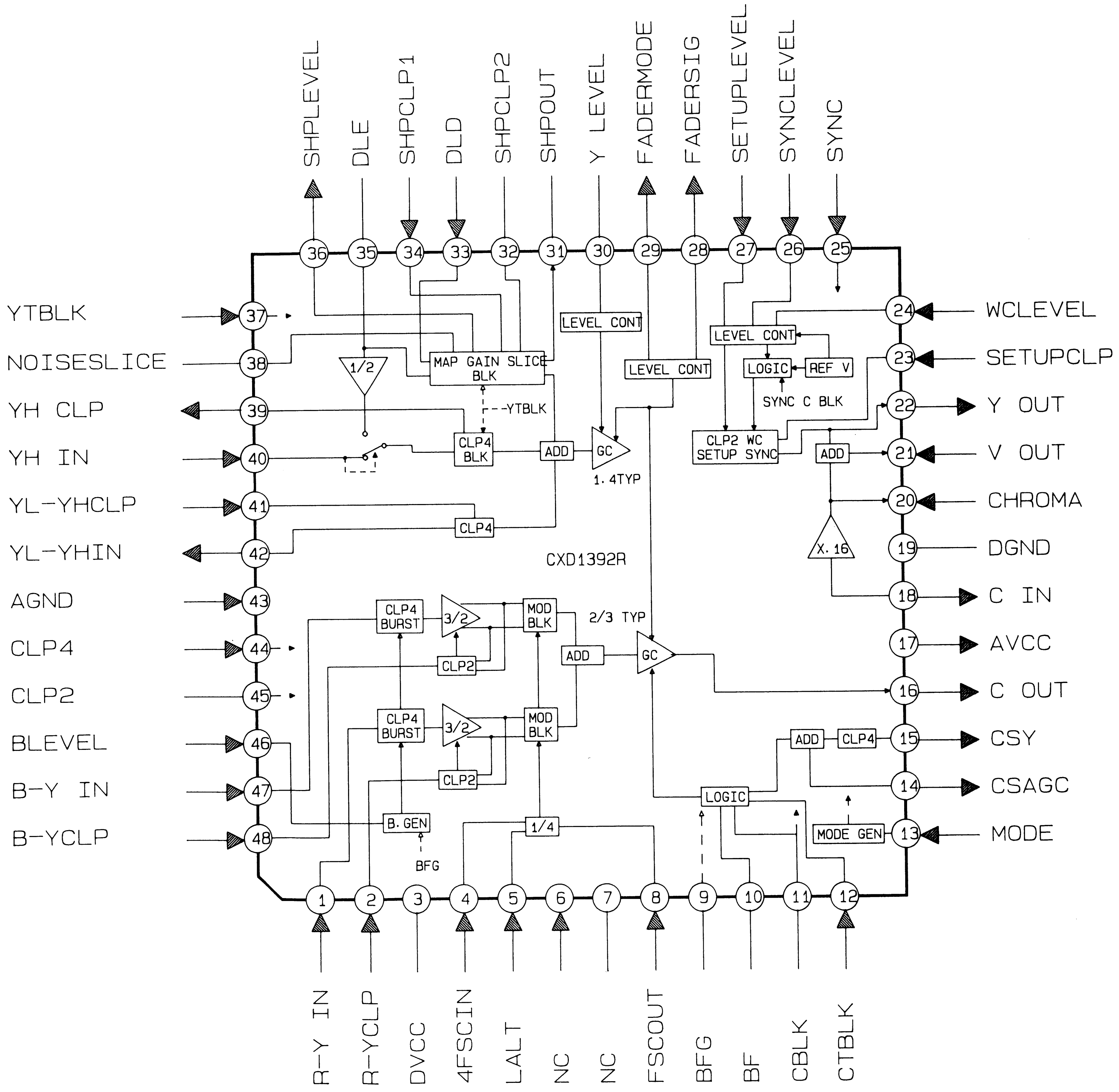
PIN NO	VOLTAGE(DC)
1	4.8V
2	3.9V
3	3.2V
4	4.8V
5	2.9V
6	2.3V

TR NO	E	B	C
Q201	1.8V	2.5V	3.0V
Q203	2.4V	1.8V	0.0V
Q204	9.0V	9.6V	14.9V
Q205	1.8V	1.2V	0.0V
Q206	1.1V	0.5V	5.0V
Q207	3.4V	2.8V	0.0V
Q209	2.3V	2.9V	3.9V
Q210	0.0V	0.0V	3.7V
Q211	1.6V	1.0V	0.0V
Q212	0.0V	0.0V	3.7V
Q213	1.7V	2.3V	4.9V
Q214	2.6V	3.1V	4.9V
Q215	2.6V	3.0V	0.0V
Q219	1.3V	1.9V	4.8V
Q220	0.7V	0.0V	0.0V
Q221	3.3V	1.9V	2.4V
Q222	3.0V	3.5V	4.8V
Q226	0.6V	0.0V	0.0V

IC203 CXA1391R

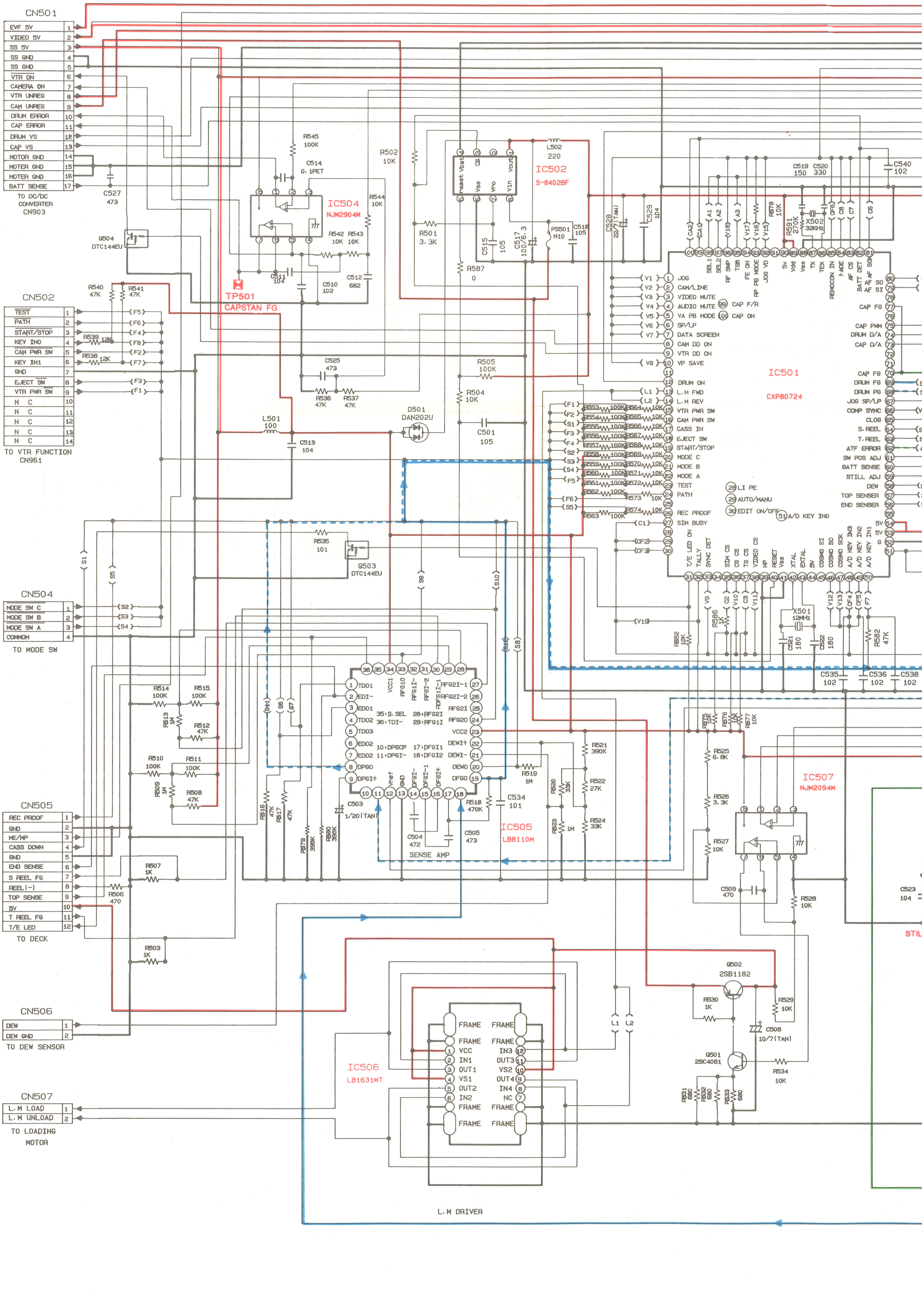

DL C1 IN
C1 GAIN
DLCO OUT
R MTX
CLP C MPX1
CLP C MPX2
B MTX
ID
B GAIN
B CONT
R CONT
R GAIN
CLP C B
CLP C G
CLP C R
C LEVEL
S2 IN
S1 IN
CLP C YO
DLYO OUT
DLY1 OUT
Y1 GAIN
DLY1 IN
DLY2 IN
Y2 GAIN
GND
LPF ADJ1
LPF ADJ2
LPF ADJ3
VCC
Y-γ CONT
YH IN
C SLICCE
WB DC
WB B
WB G
WB R
C-γ CONT
GND
YL OUT
CS OUT
CS GAIN
R-Y HUE
B-Y HUE
R-Y OUT
B-Y OUT
B-Y GAIN
R-Y GAIN
CLP C YH
DLYH IN
CLP C DL YH
DLYH OUT
YH OUT1
YH OUT2
TP
DLYH GAIN
CLP4
CLP2
VAP OUT
VAP GAIN
CLP C VAP
VAP SLICE
CLP C CS
CS IN
CXD1391R
WS CONTROL
MATRIX
WS AMP
LPF
CLP (CLP2)
CLP (CLP2) & MPX
CLP (CLP4)
GC
SLICE
γ
YL MTX
KNEE
3H APCN
2H APCN
V-APCN
ABS
CS VAP MAX
CS-Y
G ch C SLICE
R-Y B-Y MTX MUS & GC
CLP
YH0
YH1
Y0
Y1
Y2
C0
C1
CD
CR
R-WB
G-WR
B-WR
B-γ
R-γ
G-γ

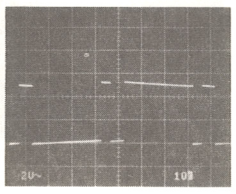
IC205 CXA1392R

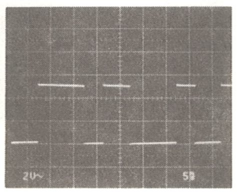

SHPLEVEL
DLE
SHPCLP1
DLD
SHPCLP2
SHPOUT
Y LEVEL
FADERMODE
FADERSIG
SETUPLEVEL
SYNCLEVEL
SYNC
36
35
34
33
32
31
30
29
28
27
26
25
YTBLK 37
NOISESLICE 38
YH CLP 39
YH IN 40
YL-YHCLP 41
YL-YHIN 42
AGND 43
CLP4 44
CLP2 45
BLEVEL 46
B-Y IN 47
B-YCLP 48
24 WCLEVEL
23 SETUPCLP
22 Y OUT
21 V OUT
20 CHROMA
19 DGND
18 C IN
17 AVCC
16 C OUT
15 CSY
14 CSAGC
13 MODE
1 R-Y IN
2 R-YCLP
3 DVCC
4 4FSCIN
5 LALT
6 NC
7 NC
8 FSCOUT
9 BFG
10 BF
11 CBLK
12 CTBLK
MAP GAIN SLICE BLK
1/2
YTBLK
CLP4 BLK
ADD
GC
1.4TYP
LEVEL CONT
LEVEL CONT
LEVEL CONT
LOGIC
REF V
SYNC C BLK
CLP2 WC SETUP SYNC
ADD
X.16
CLP4
CXD1392R
CLP4 BURST
3/2
MOD BLK
CLP2
2/3 TYP
ADD
GC
CLP4 BURST
3/2
MOD BLK
CLP2
B.GEN
BFG
1/4
LOGIC
ADD
CLP4
MODE GEN

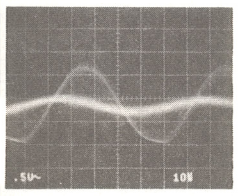
10-3. System Control/Servo

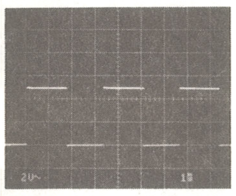
RED POWER LINE
BLUE DRUM SPEED CTL
DRUM PHASE CTL
GREEN

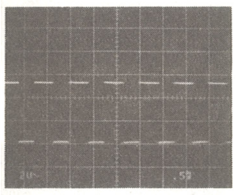

CN501
EVF 5V
VIDEO 5V
SS 5V
SS GND
SS GND
VTR ON
CAMERA ON
VTR UNREG
CAM UNREG
DRUM ERROR
CAP ERROR
DRUM VS
CAP VS
MOTOR GND
MOTER GND
MOTER GND
BATT SENSE
TO DC/DC CONVERTER CN903
C527 473
Q504 DTC144EU
R545 100K
C514 0.1PET
IC504 NJM2904M
R544 10K
R542 10K
R543 10K
C511 104
C510 102
C512 682
TP501 CAPSTAN FG
R502 10K
R501 3.3K
IC502 S-8402BF
L502 220
C515 105
C517 100/6.3
PS501 N10
C518 105
R587 0
C528 22/7(TAN)
C529 104
C519 150
C520 330
C540 102
R591 270K
X502 32KHz
R578 10K
CN502
TEST
PATH
START/STOP
KEY IN0
CAM PWR SW
KEY IN1
GND
EJECT SW
VTR PWR SW
N C
TO VTR FUNCTION CN961
R540 47K
R541 47K
R539 12K
R538 12K
C525 473
R536 47K
R537 47K
R505 100K
R504 10K
L501 100
C513 104
D501 DAN202U
C501 105
IC501
CXP80724
JOG
CAM/LINE
VIDEO MUTE
AUDIO MUTE
VA PB MODE
SP/LP
DATA SCREEN
CAM DD ON
VTR DD ON
VP SAVE
DRUM ON
L.M FWD
L.M REV
VTR PWR SW
CAM PWR SW
CASS IN
EJECT SW
START/STOP
MODE C
MODE B
MODE A
TEST
PATH
REC PROOF
SIM BUSY
LI PE
AUTO/MANU
EDIT ON/OFF
A/D KEY IN0
CAP F/R
CAP ON
CAP FG
CAP PWM
DRUM D/A
CAP D/A
DRUM FG
DRUM PG
JOG SP/LP
COMP SYNC
CLOG
S.REEL
T.REEL
ATF ERROR
SW POS ADJ
BATT SENSE
STILL ADJ
DEW
TOP SENSER
END SENSER
AF SO
AF SI
X501 12MHz
C521 180
C522 180
R582 47K
C535 102
C536 102
C538 102
R535 101
Q503 DTC144EU
CN504
MODE SW C
MODE SW B
MODE SW A
COMMON
TO MODE SW
IC505 LB8110M
SENSE AMP
R514 100K
R515 100K
R513 1M
R512 47K
R510 100K
R511 100K
R509 1M
R508 47K
C503 1/20(TAN)
C504 472
C505 473
R518 470K
C534 101
R519 1M
R521 390K
R522 27K
R520 33K
R523 1M
R524 33K
R516 47K
R517 47K
R579 390K
R580 390K
CN505
REC PROOF
GND
ME/MP
CASS DOWN
GND
END SENSE
S REEL FG
REEL(-)
TOP SENSE
5V
T REEL FG
T/E LED
TO DECK
R507 1K
R506 470
R503 1K
IC507 NJM2094M
R525 6.8K
R526 3.3K
R527 10K
C509 470
R528 10K
C523 104
STIL
CN506
DEW
DEW GND
TO DEW SENSOR
CN507
L.M LOAD
L.M UNLOAD
TO LOADING MOTOR
IC506 LB1631MT
FRAME
VCC
IN1
OUT1
VS1
OUT2
IN2
IN3
OUT3
VS2
OUT4
IN4
NC
L.M DRIVER
Q502 2SB1182
R530 1K
R529 10K
C508 10/7(TAN)
Q501 2SC4081
R534 10K
R531 680
R532 680
R533 680

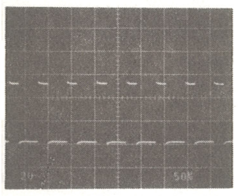

IC501-97
SEL-2 (PB)
5Vp-p


IC501-98
SEL-1 (PB)
5Vp-p


IC601-33
FH IN
1.5Vp-p

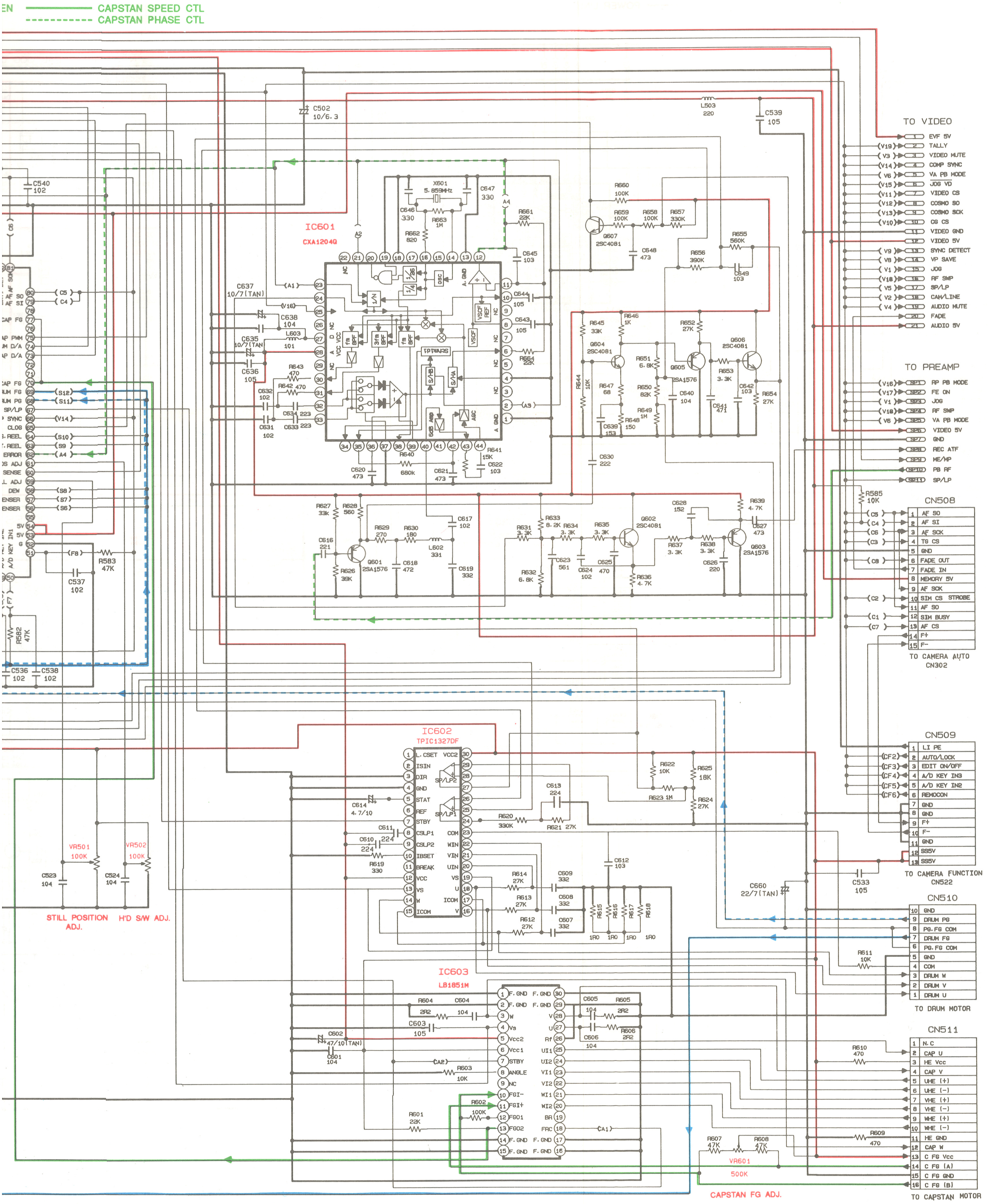

IC501-68
D-PG (PB)
5Vp-p


IC501-70
C-PG (PB)
5Vp-p


IC501-75
PWM (PB)
5Vp-p

SYSTEM CONTROL SERVO

SYSTEM CONTROL SERVO



CAPSTAN SPEED CTL
CAPSTAN PHASE CTL
IC601
CXA1204Q
X601 5.859MHz
Q607 2SC4081
Q604 2SC4081
Q605 2SA1576
Q606 2SC4081
Q601 2SA1576
Q602 2SC4081
Q603 2SA1576
IC602
TPIC1327DF
IC603
LB1851M
TO VIDEO
EVF 5V
TALLY
VIDEO MUTE
COMP SYNC
VA PB MODE
JOG VD
VIDEO CS
COSMO SO
COSMO SCK
CG CS
VIDEO GND
VIDEO 5V
SYNC DETECT
VP SAVE
JOG
RF SWP
SP/LP
CAM/LINE
AUDIO MUTE
FADE
AUDIO 5V
TO PREAMP
RP PB MODE
FE ON
JOG
RF SWP
VA PB MODE
VIDEO 5V
GND
REC ATF
ME/MP
PB RF
SP/LP
CN508
AF SO
AF SI
AF SCK
TG CS
GND
FADE OUT
FADE IN
MEMORY 5V
AF SCK
SIM CS STROBE
AF SO
SIM BUSY
AF CS
F+
F-
TO CAMERA AUTO CN302
CN509
LI PE
AUTO/LOCK
EDIT ON/OFF
A/D KEY IN3
A/D KEY IN2
REMOCON
GND
GND
F+
F-
GND
SS5V
SS5V
TO CAMERA FUNCTION CN522
CN510
GND
DRUM PG
PG.FG COM
DRUM FG
PG.FG COM
GND
COM
DRUM W
DRUM V
DRUM U
TO DRUM MOTOR
CN511
N.C
CAP U
HE Vcc
CAP V
UHE (+)
UHE (-)
VHE (+)
VHE (-)
WHE (+)
WHE (-)
HE GND
CAP W
C FG Vcc
C FG (A)
C FG GND
C FG (B)
TO CAPSTAN MOTOR
VR501 100K
VR502 100K
STILL POSITION ADJ.
H'D S/W ADJ.
VR601 500K
CAPSTAN FG ADJ.

SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

NOTE
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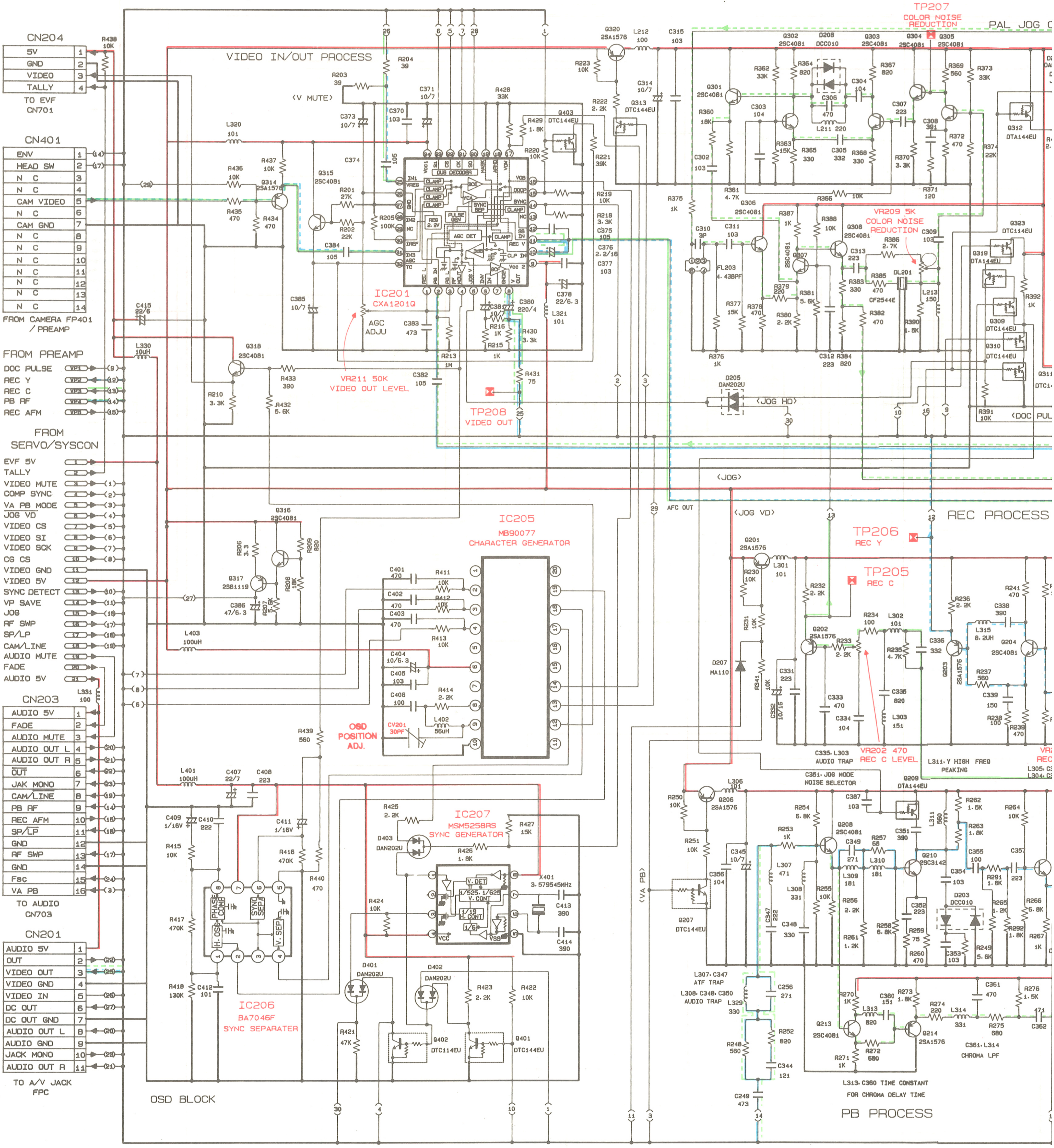
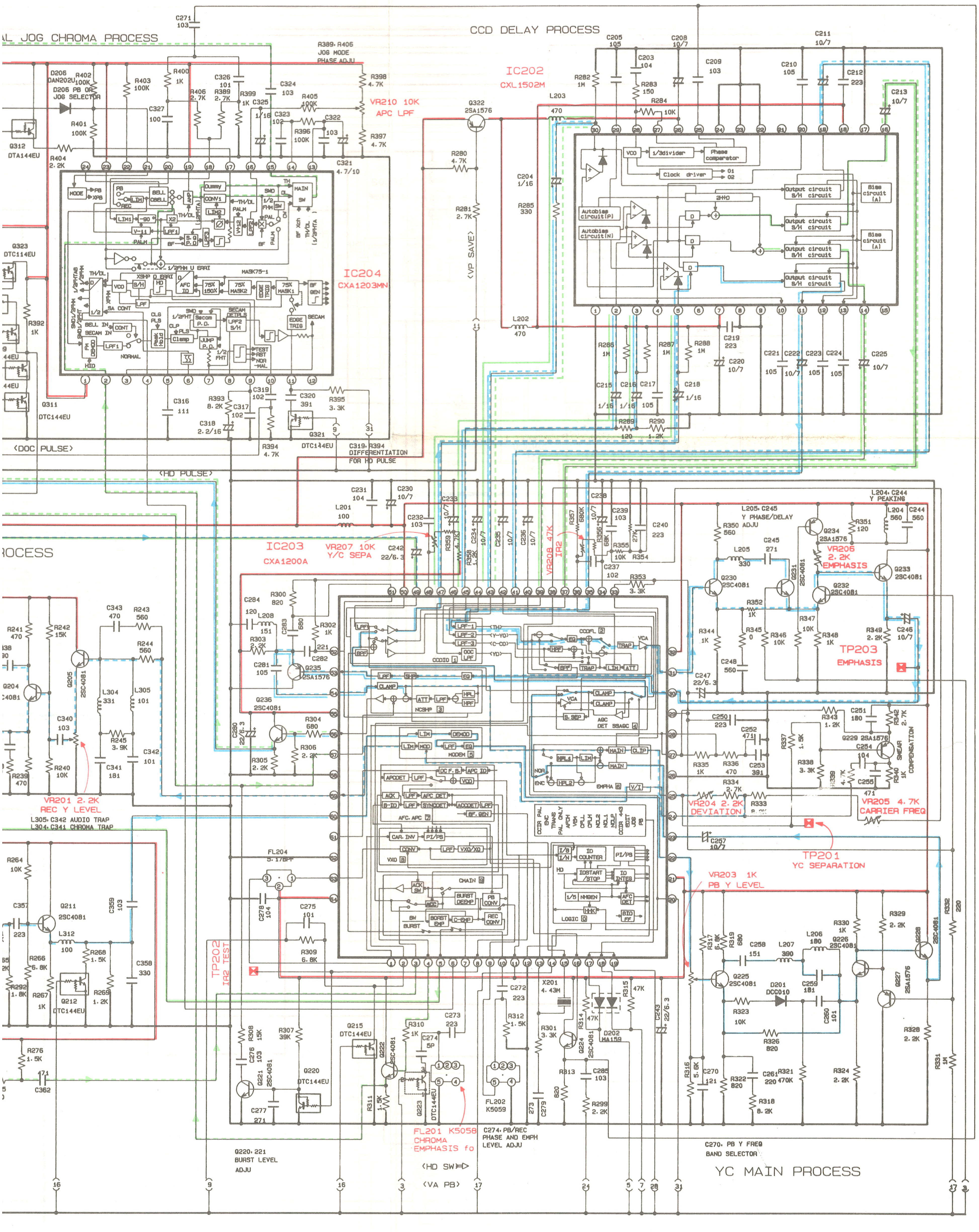
10-4. Video

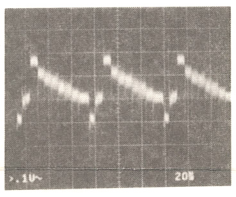
RED — POWER LINE

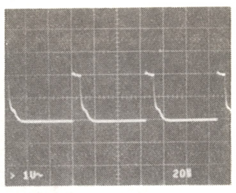
BLUE — PB Y PROCESS
BLUE (dashed) — REC Y PROCESS

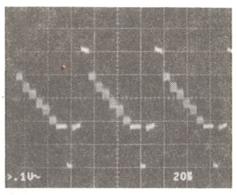
GREEN (dashed) — PB C PROCESS
GREEN — REC C PROCESS

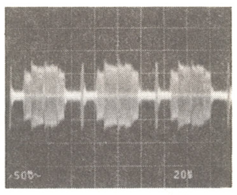

CN204
5V
GND
VIDEO
TALLY
TO EVF CN701
CN401
ENV
HEAD SW
N C
CAM VIDEO
CAM GND
FROM CAMERA FP401 / PREAMP
FROM PREAMP
DOC PULSE
REC Y
REC C
PB RF
REC AFM
FROM SERVO/SYSCON
EVF 5V
TALLY
VIDEO MUTE
COMP SYNC
VA PB MODE
JOG VD
VIDEO CS
VIDEO SI
VIDEO SCK
CG CS
VIDEO GND
VIDEO 5V
SYNC DETECT
VP SAVE
JOG
RF SWP
SP/LP
CAM/LINE
AUDIO MUTE
FADE
AUDIO 5V
CN203
AUDIO 5V
FADE
AUDIO MUTE
AUDIO OUT L
AUDIO OUT R
OUT
JAK MONO
CAM/LINE
PB RF
REC AFM
SP/LP
GND
RF SWP
GND
Fsc
VA PB
TO AUDIO CN703
CN201
AUDIO 5V
OUT
VIDEO OUT
VIDEO GND
VIDEO IN
DC OUT
DC OUT GND
AUDIO OUT L
AUDIO GND
JACK MONO
AUDIO OUT R
TO A/V JACK FPC
VIDEO IN/OUT PROCESS
(V MUTE)
IC201
CXA1201Q
AGC ADJU
VR211 50K
VIDEO OUT LEVEL
TP208
VIDEO OUT
IC205
MB90077
CHARACTER GENERATOR
OSD POSITION ADJ.
IC207
MSM5258RS
SYNC GENERATOR
IC206
BA7046F
SYNC SEPARATER
OSD BLOCK
TP207
COLOR NOISE REDUCTION
PAL JOG
VR209 5K
COLOR NOISE REDUCTION
(JOG HD)
(JOG)
(JOG VD)
AFC OUT
(VA PB)
REC PROCESS
TP206
REC Y
TP205
REC C
VR202 470
REC C LEVEL
C335, L303 AUDIO TRAP
L311: Y HIGH FREQ PEAKING
C351: JOG MODE NOISE SELECTOR
L307, C347 ATF TRAP
L308, C348, C350 AUDIO TRAP
C361, L314 CHROMA LPF
L313, C360 TIME CONSTANT FOR CHROMA DELAY TIME
PB PROCESS
(DOC PUL

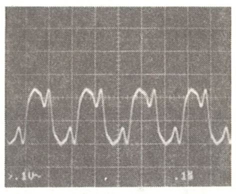

JOG CHROMA PROCESS
CCD DELAY PROCESS
IC202
CXL1502M
IC204
CXA1203MN
IC203
CXA1200A
VR210 10K
APC LPF
VR207 10K
Y/C SEPA
VR208 47K
IR2
VR206
2.2K
EMPHASIS
TP203
EMPHASIS
VR204 2.2K
DEVIATION
VR205 4.7K
CARRIER FREQ
TP201
YC SEPARATION
VR203 1K
PB Y LEVEL
VR201 2.2K
REC Y LEVEL
TP202
IR2 TEST
R389, R406
JOG MODE
PHASE ADJU
D206 PB OR
JOG SELECTOR
Q322
2SA1576
Q312
DTA144EU
Q323
DTC114EU
Q311
DTC144EU
Q321
DTC144EU
〈DOC PULSE〉
〈HD PULSE〉
〈VP SAVE〉
C319, R394
DIFFERENTIATION
FOR HD PULSE
L204, C244
Y PEAKING
L205, C245
Y PHASE/DELAY
ADJU
Q234
2SA1576
Q233
2SC4081
Q230
2SC4081
Q231
2SC4081
Q232
2SC4081
Q229 2SA1576
Q235
2SA1576
Q236
2SC4081
Q205
2SC4081
Q204
2SC4081
Q211
2SC4081
Q212
DTC144EU
Q215
DTC144EU
Q222
2SC4081
Q223
DTC144EU
Q221
2SC4081
Q220
DTC144EU
Q224
2SC4081
Q225
2SC4081
Q226
2SC4081
Q228
2SC4081
Q227
2SA1576
D201
DCC010
D202
MA159
X201
4.43M
FL204
5.17BPF
FL201 K5058
CHROMA
EMPHASIS fo
FL202
K5059
C274: PB/REC
PHASE AND EMPH
LEVEL ADJU
Q220, 221
BURST LEVEL
ADJU
C270, PB Y FREQ
BAND SELECTOR
L305, C342 AUDIO TRAP
L304, C341 CHROMA TRAP
〈HD SW〉
〈VA PB〉
YC MAIN PROCESS

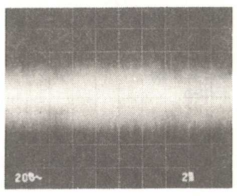

TP201
Y/C SEPARATION
(REC)

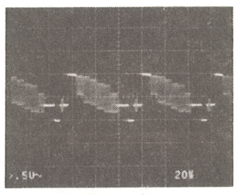

TP202
IR2 (REC)
6.8μs

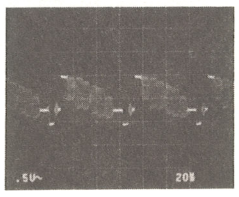

TP203
EMPHASIS INPUT (REC)
500mVp-p


TP205
REC C CURRENT (REC)
130mVp-p


TP206
REC Y CURRENT (REC)
270mVp-p


TP207
CNR (PB)
MINIMIZE THIS SIGNAL


TP208
V. OUT LEVEL (E-E)
2.0Vp-p


TP208
PB Y LEVEL (PB)
1.0Vp-p

SPECIAL NOTE
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NOTE
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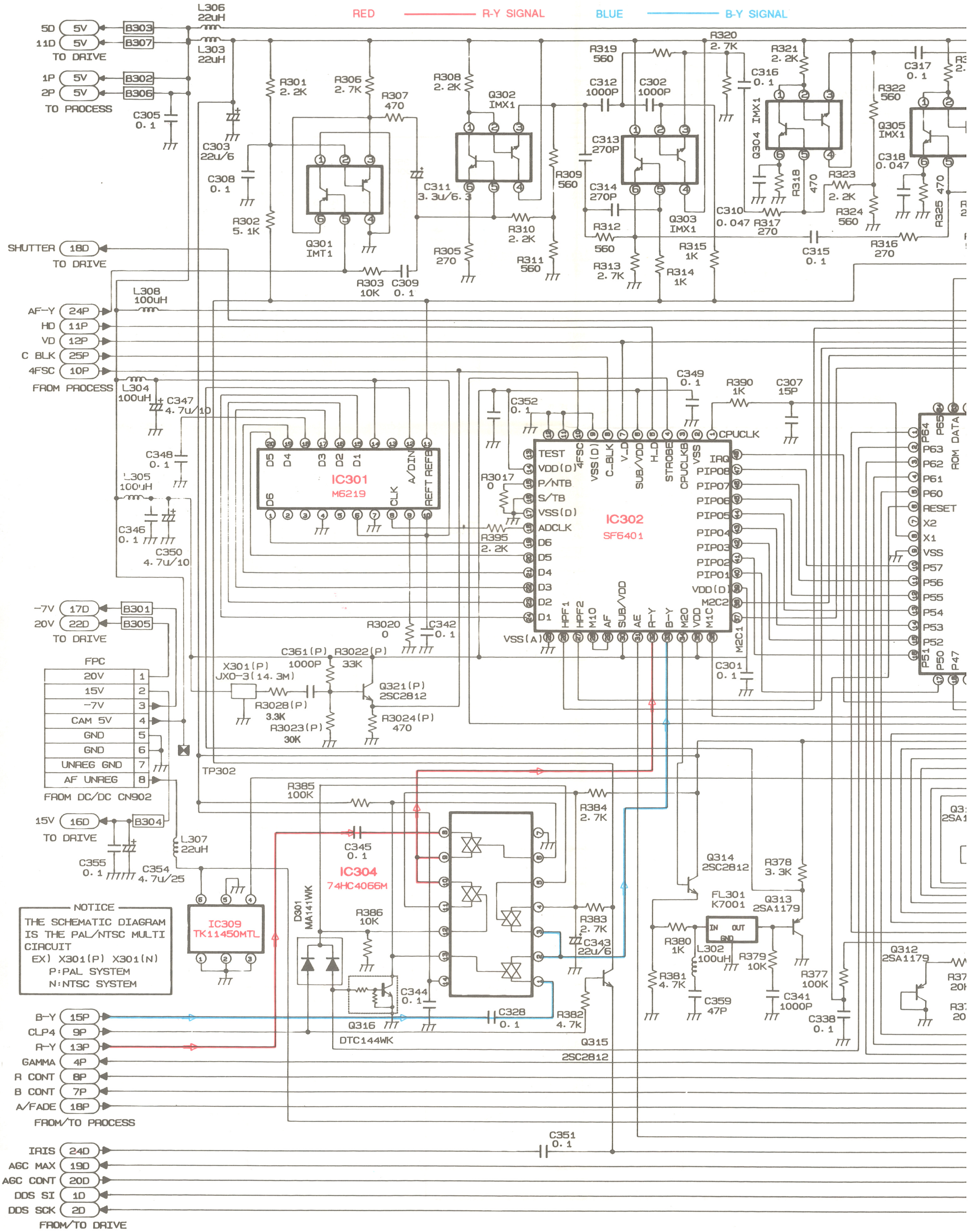
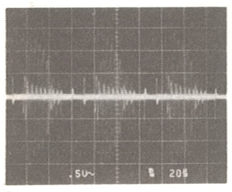
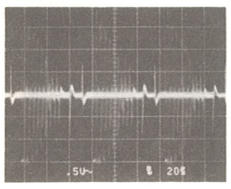
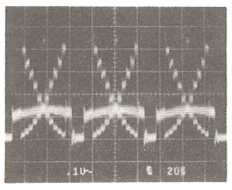
10-18. Auto Focus

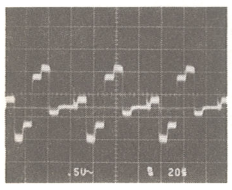

RED — R-Y SIGNAL
BLUE — B-Y SIGNAL
5D 5V B303
11D 5V B307
TO DRIVE
1P 5V B302
2P 5V B306
TO PROCESS
SHUTTER 18D
TO DRIVE
AF-Y 24P
HD 11P
VD 12P
C BLK 25P
4FSC 10P
FROM PROCESS
-7V 17D B301
20V 22D B305
TO DRIVE
FPC
20V 1
15V 2
-7V 3
CAM 5V 4
GND 5
GND 6
UNREG GND 7
AF UNREG 8
FROM DC/DC CN902
15V 16D B304
TO DRIVE
B-Y 15P
CLP4 9P
R-Y 13P
GAMMA 4P
R CONT 8P
B CONT 7P
A/FADE 18P
FROM/TO PROCESS
IRIS 24D
AGC MAX 19D
AGC CONT 20D
DDS SI 1D
DDS SCK 2D
FROM/TO DRIVE
IC301 M6219
IC302 SF6401
IC304 74HC4066M
IC309 TK11450MTL
Q301 IMT1
Q302 IMX1
Q303 IMX1
Q304 IMX1
Q305 IMX1
Q312 2SA1179
Q313 2SA1179
Q314 2SC2812
Q315 2SC2812
Q316 DTC144WK
Q321(P) 2SC2812
D301 MA141WK
X301(P) JXO-3(14.3M)
FL301 K7001
TP302
CPUCLK
ROM DATA
RESET

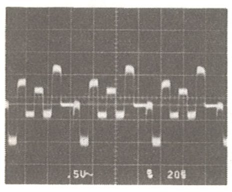
NOTICE
THE SCHEMATIC DIAGRAM IS THE PAL/NTSC MULTI CIRCUIT
EX) X301(P) X301(N)
P:PAL SYSTEM
N:NTSC SYSTEM


IC203-26
HPF 1


IC203-27
HPF 2

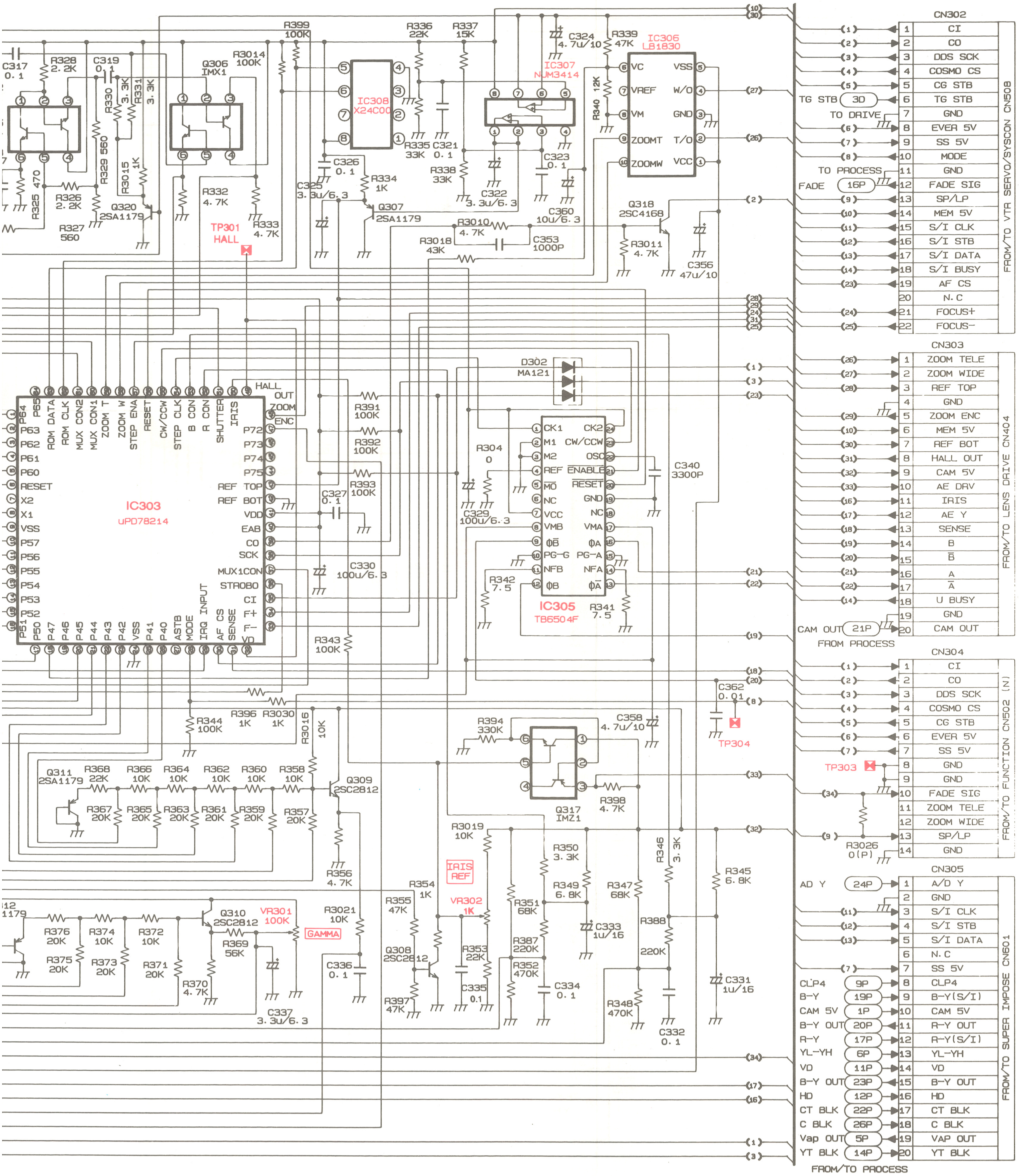

IC302-31
AE


IC302-32
R-Y


IC302-33
B-Y

AUTO FOCUS

AUTO FOCUS


IC303
uPD78214
IC305
TB6504F
IC306
LB1830
IC307
NJM3414
IC308
X24C00
Q306
IMX1
Q307
2SA1179
Q309
2SC2812
Q310
2SC2812
Q311
2SA1179
Q308
2SC2812
Q317
IMZ1
Q318
2SC4168
Q320
2SA1179
D302
MA121
TP301
HALL
TP303
TP304
VR301
100K
GAMMA
VR302
1K
IRIS
REF
P64
P65
ROM DATA
ROM CLK
MUX CON2
MUX CON1
ZOOM T
ZOOM W
STEP ENA
RESET
CW/CCW
STEP CLK
B CON
R CON
SHUTTER
IRIS
HALL OUT
ZOOM ENC
P72
P73
P74
P75
REF TOP
REF BOT
VDD
EAB
CO
SCK
MUX1CON
STROBO
CI
F+
F−
VD
P63
P62
P61
P60
X2
X1
VSS
P57
P56
P55
P54
P53
P52
P51
P50
P47
P46
P45
P44
P43
P42
P41
P40
ASTB
MODE
IRQ INPUT
AF CS
SENSE
CK1
CK2
M1
CW/CCW
M2
OSC
REF
ENABLE
MO
RESET
NC
GND
VCC
VMB
VMA
φB
φA
PG−G
PG−A
NFB
NFA
VC
VSS
VREF
W/O
VM
ZOOMT
T/O
ZOOMW
C317 0.1
R328 2.2K
C319 0.1
R330 3.3K
R331 3.3K
R329 560
R3015 1K
R325 470
R326 2.2K
R327 560
R3014 100K
R399 100K
R332 4.7K
R333 4.7K
C326 0.1
C325 3.3u/6.3
R334 1K
R336 22K
R337 15K
R335 33K
C321 0.1
R338 33K
C322 3.3u/6.3
C324 4.7u/10
R339 47K
R340 12K
C323 0.1
C360 10u/6.3
R3010 4.7K
C353 1000P
R3018 43K
R3011 4.7K
C356 47u/10
R391 100K
R392 100K
R393 100K
C327 0.1
R304 0
C329 100u/6.3
C340 3300P
C330 100u/6.3
R342 7.5
R341 7.5
R343 100K
C362 0.01
R344 100K
R396 1K
R3030 1K
R3016 10K
R394 330K
C358 4.7u/10
R398 4.7K
R368 22K
R366 10K
R364 10K
R362 10K
R360 10K
R358 10K
R367 20K
R365 20K
R363 20K
R361 20K
R359 20K
R357 20K
R356 4.7K
R3019 10K
R350 3.3K
R346 3.3K
R345 6.8K
R354 1K
R355 47K
R351 68K
R349 6.8K
R347 68K
C333 1u/16
R388 220K
R387 220K
R376 20K
R374 10K
R372 10K
R375 20K
R373 20K
R371 20K
R369 56K
R370 4.7K
R3021 10K
C336 0.1
C337 3.3u/6.3
R353 22K
C335 0.1
R397 47K
R352 470K
C334 0.1
R348 470K
C332 0.1
C331 1u/16
R3026 0(P)
TG STB
3D
TO DRIVE
TO PROCESS
FADE
16P
CAM OUT
21P
FROM PROCESS
CN302
1 CI
2 CO
3 DDS SCK
4 COSMO CS
5 CG STB
6 TG STB
7 GND
8 EVER 5V
9 SS 5V
10 MODE
11 GND
12 FADE SIG
13 SP/LP
14 MEM 5V
15 S/I CLK
16 S/I STB
17 S/I DATA
18 S/I BUSY
19 AF CS
20 N.C
21 FOCUS+
22 FOCUS−
FROM/TO VTR SERVO/SYSCON CN508
CN303
1 ZOOM TELE
2 ZOOM WIDE
3 REF TOP
4 GND
5 ZOOM ENC
6 MEM 5V
7 REF BOT
8 HALL OUT
9 CAM 5V
10 AE DRV
11 IRIS
12 AE Y
13 SENSE
14 B
15 B̄
16 A
17 Ā
18 U BUSY
19 GND
20 CAM OUT
FROM/TO LENS DRIVE CN404
CN304
1 CI
2 CO
3 DDS SCK
4 COSMO CS
5 CG STB
6 EVER 5V
7 SS 5V
8 GND
9 GND
10 FADE SIG
11 ZOOM TELE
12 ZOOM WIDE
13 SP/LP
14 GND
FROM/TO FUNCTION CN502 (N)
CN305
1 A/D Y
2 GND
3 S/I CLK
4 S/I STB
5 S/I DATA
6 N.C
7 SS 5V
8 CLP4
9 B−Y(S/I)
10 CAM 5V
11 R−Y OUT
12 R−Y(S/I)
13 YL−YH
14 VD
15 B−Y OUT
16 HD
17 CT BLK
18 C BLK
19 VAP OUT
20 YT BLK
FROM/TO SUPER IMPOSE CN601
AD Y 24P
CLP4 9P
B−Y 19P
CAM 5V 1P
B−Y OUT 20P
R−Y 17P
YL−YH 6P
VD 11P
B−Y OUT 23P
HD 12P
CT BLK 22P
C BLK 26P
Vap OUT 5P
YT BLK 14P
FROM/TO PROCESS

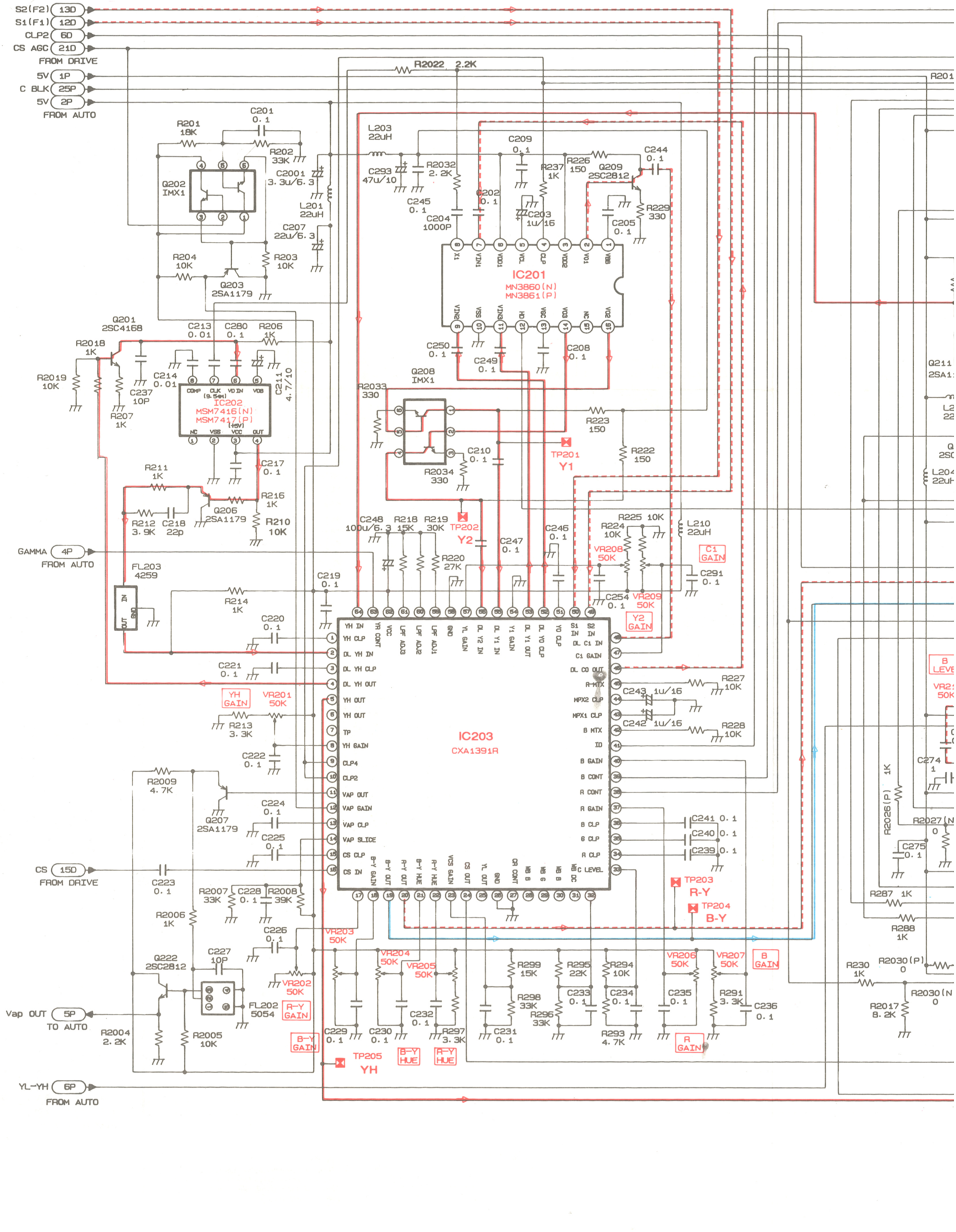
SPECIAL NOTE
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

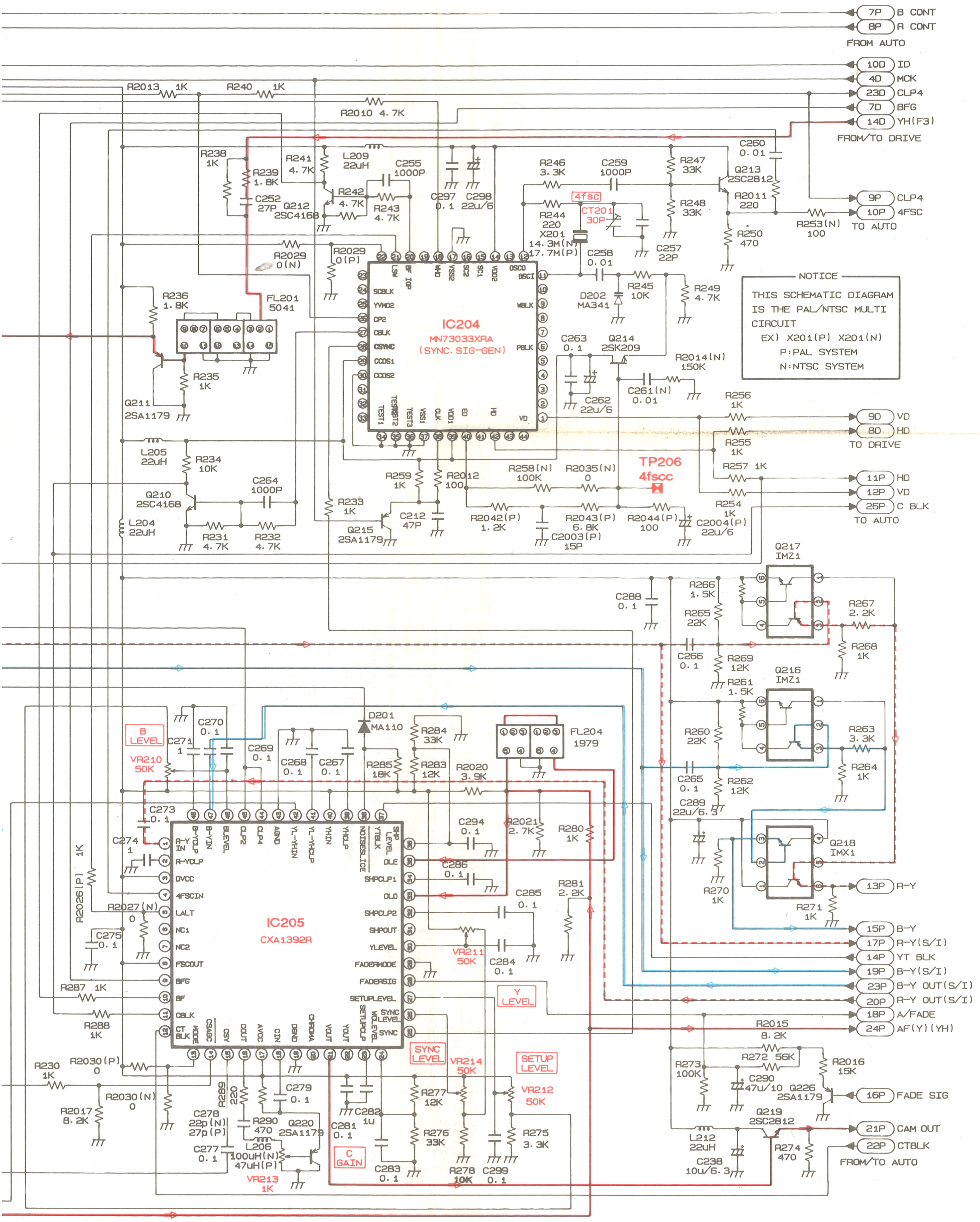
NOTE
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list. And may be slightly different or amended since this drawing was prepared.

10-19. Process

RED —— Y SIGNAL
- - - - R-Y SIGNAL

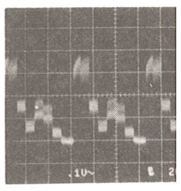
BLUE —— B-Y SIGNAL

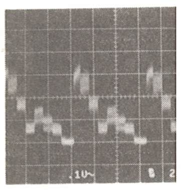

S2(F2) 13D
S1(F1) 12D
CLP2 6D
CS AGC 21D
FROM DRIVE
5V 1P
C BLK 25P
5V 2P
FROM AUTO
R2022 2.2K
R201 18K
C201 0.1
R202 33K
Q202 IMX1
C2001 3.3u/6.3
L201 22uH
C207 22u/6.3
R204 10K
R203 10K
Q203 2SA1179
L203 22uH
C293 47u/10
C245 0.1
R2032 2.2K
C204 1000P
C202 0.1
C209 0.1
C203 1u/16
R237 1K
R226 150
Q209 2SC2812
C244 0.1
R229 330
C205 0.1
IC201
MN3860(N)
MN3861(P)
X1
VIN1
VDD1
VOL
CLP
VDD2
VO1
VBB
VIN2
VSS
VIN1
OH
VBG
VO3
NC
VO2
C250 0.1
C249 0.1
C208 0.1
Q201 2SC4168
R2018 1K
R2019 10K
C213 0.01
C280 0.1
R206 1K
C214 0.01
C237 10P
R207 1K
C211 4.7/10
IC202
MSM7416(N)
MSM7417(P)
COMP
CLK (9.5MH)
VD IN
VDB
NC
VSS
VCC (+5V)
OUT
R211 1K
C217 0.1
R216 1K
R212 3.9K
C218 22p
Q206 2SA1179
R210 10K
Q208 IMX1
R2033 330
R2034 330
C210 0.1
R223 150
R222 150
TP201
Y1
GAMMA 4P
FROM AUTO
FL203 4259
IN
OUT
GND
R214 1K
C219 0.1
C248 100u/6.3
R218 15K
R219 30K
TP202
Y2
R220 27K
C247 0.1
C246 0.1
R225 10K
R224 10K
VR208 50K
L210 22uH
C1 GAIN
C291 0.1
C254 0.1
VR209 50K
Y2 GAIN
C220 0.1
C221 0.1
YH GAIN
VR201 50K
R213 3.3K
C222 0.1
IC203
CXA1391R
YH IN
YH CLP
DL YH IN
DL YH CLP
DL YH OUT
YH OUT
YH OUT
TP
YH GAIN
CLP4
CLP2
VAP OUT
VAP GAIN
VAP CLP
VAP SLICE
CS CLP
CS IN
YR CONT
VCC
LPF ADJ3
LPF ADJ2
LPF ADJ1
GND
YL GAIN
DL Y2 IN
DL Y1 IN
Y1 GAIN
DL Y1 OUT
DL Y0 CLP
Y0 CLP
S1 IN
S2 IN
DL C1 IN
C1 GAIN
DL C0 OUT
R-MTX
MPX2 CLP
MPX1 CLP
B MTX
ID
B GAIN
B CONT
R CONT
R GAIN
B CLP
G CLP
R CLP
C LEVEL
B-Y GAIN
B-Y OUT
B-Y HUE
R-Y OUT
R-Y HUE
VCS GAIN
CS OUT
YL OUT
GND
CR CONT
WB B
WB G
WB R
DC
R227 10K
C243 1u/16
C242 1u/16
R228 10K
C241 0.1
C240 0.1
C239 0.1
TP203
R-Y
TP204
B-Y
R2009 4.7K
Q207 2SA1179
C224 0.1
C225 0.1
CS 15D
FROM DRIVE
C223 0.1
R2007 33K
C228 0.1
R2008 39K
R2006 1K
C226 0.1
Q222 2SC2812
C227 10P
VR202 50K
R-Y GAIN
FL202 5054
Vap OUT 5P
TO AUTO
R2004 2.2K
R2005 10K
B-Y GAIN
VR203 50K
VR204 50K
VR205 50K
C229 0.1
C230 0.1
C232 0.1
R297 3.3K
TP205
YH
B-Y HUE
R-Y HUE
R299 15K
R298 33K
R296 33K
C231 0.1
R295 22K
C233 0.1
R294 10K
C234 0.1
R293 4.7K
VR206 50K
C235 0.1
VR207 50K
B GAIN
R291 3.3K
C236 0.1
R GAIN
YL-YH 6P
FROM AUTO
Q211 2SA1
Q 2SC
L204 22uH
B LEVE
VR2 50K
C274
R2026(P) 1K
R2027(N) 0
C275 0.1
R287 1K
R288 1K
R230 1K
R2030(P) 0
R2030(N) 0
R2017 8.2K

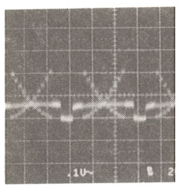

7P B CONT
8P R CONT
FROM AUTO
10D ID
4D MCK
23D CLP4
7D BFG
14D YH(F3)
FROM/TO DRIVE
9P CLP4
10P 4FSC
TO AUTO
9D VD
8D HD
TO DRIVE
11P HD
12P VD
26P C BLK
TO AUTO
13P R-Y
15P B-Y
17P R-Y(S/I)
14P YT BLK
19P B-Y(S/I)
23P B-Y OUT(S/I)
20P R-Y OUT(S/I)
18P A/FADE
24P AF(Y)(YH)
16P FADE SIG
21P CAM OUT
22P CTBLK
FROM/TO AUTO
IC204
MN73033XRA
(SYNC. SIG-GEN)
IC205
CXA1392R
TP206
4fscc
4fsc
CT201 30P
X201 14.3M(N) 17.7M(P)
Q211 2SA1179
Q212 2SC4168
Q213 2SC2812
Q214 2SK209
Q210 2SC4168
Q215 2SA1179
Q216 IMZ1
Q217 IMZ1
Q218 IMX1
Q219 2SC2812
Q220 2SA1179
Q226 2SA1179
D201 MA110
D202 MA341
FL201 5041
FL204 1979
B LEVEL VR210 50K
VR211 50K
Y LEVEL
SYNC LEVEL VR214 50K
SETUP LEVEL VR212 50K
C GAIN
VR213 1K
R2013 1K
R240 1K
R2010 4.7K
R238 1K
R239 1.8K
R241 4.7K
L209 22uH
C255 1000P
R242 4.7K
R243 4.7K
C252 27P
C297 0.1
C298 22u/6
R246 3.3K
C259 1000P
R247 33K
C260 0.01
R2011 220
R244 220
R248 33K
R250 470
R253(N) 100
C258 0.01
C257 22P
R245 10K
R249 4.7K
R2029 0(N)
R2029 0(P)
R236 1.8K
R235 1K
C263 0.1
R2014(N) 150K
C261(N) 0.01
C262 22u/6
R256 1K
R255 1K
L205 22uH
R234 10K
C264 1000P
L204 22uH
R231 4.7K
R232 4.7K
R233 1K
R259 1K
R2012 100
R258(N) 100K
R2035(N) 0
R257 1K
R254 1K
C212 47P
R2042(P) 1.2K
R2043(P) 6.8K
R2044(P) 100
C2003(P) 15P
C2004(P) 22u/6
C288 0.1
R266 1.5K
R265 22K
R267 2.2K
R268 1K
C266 0.1
R269 12K
R261 1.5K
R260 22K
R263 3.3K
R264 1K
C265 0.1
R262 12K
C289 22u/6.3
R270 1K
R271 1K
C270 0.1
C271 1
C269 0.1
C268 0.1
C267 0.1
R284 33K
R285 18K
R283 12K
R2020 3.9K
C273 0.1
C274 1
C294 0.1
R2021 2.7K
R280 1K
C286 0.1
C285 0.1
R281 2.2K
C284 0.1
R2026(P) 1K
R2027(N) 0
C275 0.1
R287 1K
R288 1K
R230 1K
R2030(P) 0
R2030(N) 0
R2017 8.2K
R289 220
C279 0.1
C278 22p(N) 27p(P)
R290 470
C277 0.1
L206 100uH(N) 47uH(P)
C281 0.1
C282 1u
C283 0.1
R277 12K
R276 33K
R278 10K
C299 0.1
R275 3.3K
R2015 8.2K
R273 100K
R272 56K
R2016 15K
C290 47u/10
L212 22uH
C238 10u/6.3
R274 470

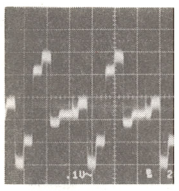
NOTICE

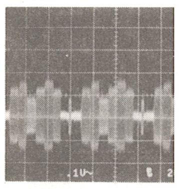
THIS SCHEMATIC DIAGRAM
IS THE PAL/NTSC MULTI
CIRCUIT
EX) X201(P) X201(N)
P:PAL SYSTEM
N:NTSC SYSTEM

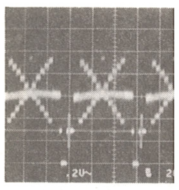

IC203-49
F2 IN

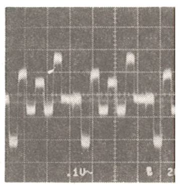

IC203-50
F1 IN


IC203-64
YH IN


IC205-1
R-Y IN


IC205-16
C OUT


IC205-21
CAM OUT


IC205-47
B-Y IN

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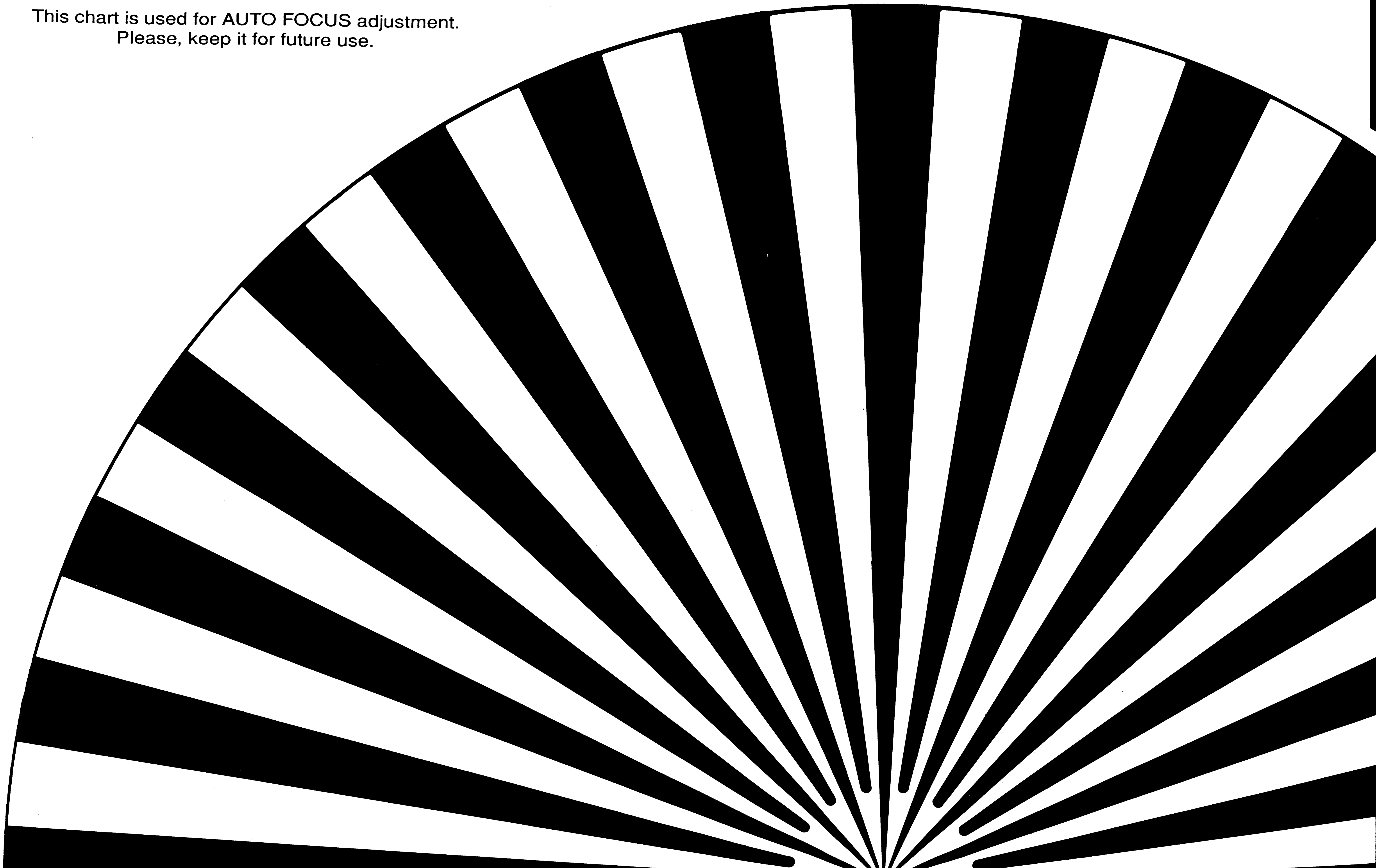
FOCUS CHART

This chart is used for AUTO FOCUS adjustment.
Please, keep it for future use.



tment.